

MOTOR AGE

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VANDERBILT CUP COURSE IS CHANGED



KRUG'S CORNER, JERICHO TURNPIKE



SAME CORNER, LAST TURN INTO STRETCH

NEW YORK, Aug. 20—The running of the third annual Vanderbilt cup race on October 8 and of the eliminating trial on September 22, for the selection of an American team, is now assured. The course has been chosen and permission for its use has been granted by the supervisors of Nassau county, Long Island. The course chosen by Chairman Thompson, Mr. Vanderbilt and their associates of the subcommittee was confirmed at a meeting of the Vanderbilt commission, held this afternoon, following a meeting of the Nassau county supervisors at Mineola in the forenoon.

The odometer measurement of the course-finders makes the new circuit a wee fraction under 30 miles, indicating a race of 300 miles, against the 283 miles covered last year. The commission is confident that the best available course has been chosen and that it will prove faster and safer than last year's, though it has two or three more turns than the seven embraced in the 1907 route. The new course avoids entering the dangerous "S" at Al-

bertson's and the nasty corner in the Guinea woods, as well as one of the railroad crossings, the only tracks to be crossed being those to the east of Mineola, on the Jericho pike, which are encountered just after entering the latter road at Krug's Corner. By cutting into the Jericho pike at Krug's, the new trolley tracks, which would have had to be crossed

at New Hyde Park and paralleled to the site of last year's grand stand, are avoided. There is a half-mile hill of average 10 per cent grade to be climbed near Manhasset, and the route runs through one of the streets of Lower Manhasset.

Roughly speaking, the new course cuts out the entire western half of the old route and substitutes a roundabout run to Lakeville by way of Roslyn and Manhasset to Mineola, via Mineola avenue, which crosses the Jericho pike at Krug's Corner. The roads are good and will require little working to make fine for both the races.

The new course starts toward the east on the Jericho turnpike, at the junction of Mineola avenue, just back of Mineola proper, in what is technically known as the town of East Williston, Krug's hotel being located on the northwest junction and corner of the two roads. The course then follows the rolling surface of the Jericho turnpike, through Westbury and over the famous Wheatley hills to Jericho. The course takes a sharp turn north to the



UNDER THE BRIDGE ON OLD WESTBURY ROAD



THE ROAD LEADING INTO WESTBURY



TURN FROM BACK ROAD INTO WESTBURY ROAD

left, following the Oyster Bay and Jericho roads, a narrow, winding, rolling highway, north through Locust Grove to East Norwich, where another sharp turn to the left is made, leaving the undertaker's establishment and furniture store on the right, and the grocery store and post-office on the left. Then it runs west on the North Hempstead turnpike through the sleepy village of Brookville and its cemetery, through the vale to Bull's Head corner, where the White cars were located last year during the campaign.

Here another sharp turn is taken south to the left, the same as last year, and on what is known as the back road to the old Westbury road, a good macadam highway, turning to the right and west again, here passing the W. C. Whitney estate and Mackay place, going west again for 200 or 300 yards under the Long Island railroad crossing, near the Roslyn Heights and the Rushmore property, the reason for using this loop being to avoid the town of Roslyn, which would necessitate a control. The cars then follow the Westbury road to Mineola avenue, going north again to the North Hempstead turnpike at Appleby's, following this westerly through the beautiful rolling country of Manhasset and turning to the left and southeast before reaching Great Neck, then taking the road to Lakeville, due south. At Lakeville a sharp turn is made to the left and easterly to the Lou Willets road, following it to Searington, where a sharp turn is made to the right to Mineola avenue, then south to the place of beginning.

The meeting of the commission was attended by Chairman Thompson, W. K. Vanderbilt, Jr.; R. Lincoln Lippitt, Frank G. Webb, E. Russell Thomas and A. G. Batchelder. By invitation, ex-Chairman A. R. Partidge and John Farson, Jr., rep-

resenting President John Farson, were also present at the session.

Several innovations were discussed. It was decided to adopt the signals to drivers used in the grand prix. These are the standard road signals recognized by the Association Generale Automobile. They will be displayed on banners stretched across the road in white on a black background. They give warning of the various obstacles and the direction of the turns to be encountered.

It is proposed, if the width of the road at the point selected for the grand stand will permit, to establish repair stations in view of the spectators thereon, who can thus see the operation of changing rims, taking on supplies, etc. At these stations it is proposed to limit the repairmen to the crew of the car. It is probable that contestants will be limited to one other repair station on the course, where the number of assistants will be unlimited. Just where the grand stand will be located has not been determined, though it is pretty sure to be on the Jericho pike, to the east of Mineola and on the straight-away stretch between that town and the

Jericho turn. Though detachable rims came up for discussion at the meeting, any embargo on them was not for a moment considered, the policy of the commission, of course, being to encourage time and labor-saving devices.

At the meeting of the Nassau county supervisors, which considered the application of the A. A. A. for the use of the course for the race and the trials, William Jones, of Oyster Bay, chairman of the board, and Edwin C. Willets, of North Hempstead, voted in favor, but Robert Seabury, of Hempstead, voted against the application, saying:

"I don't believe that this board or the legislature has any right to give the public highways to be made a race course for automobilists or anyone else."

The board of supervisors give the privilege of the use of the road with the understanding that the automobile association oil the entire course at once, which will give the public something and also pay for all flagmen for their day's work, as well as pay for all accidents and damage caused by the race.

During the hours between 5 in the morning to 3 in the afternoon, Sheriff Gildersleeve has been ordered by the board to take care of the police and see that none of the crossings is neglected and that the public is well protected.

There seems now to be little doubt that all the American cars in the eliminating trial will be equipped with detachable rims. Walter Christie has invented and already applied for a patent on a removable rim, which differs entirely from the French device used by Szisz in the grand prix and by almost all the cars in the Ardennes circuit. In Christie's device a wire spoke is required, the entire rim being removed. Christie's good sportsmanship and patriotism in



STRETCH INTO TOWN OF MANHASSET

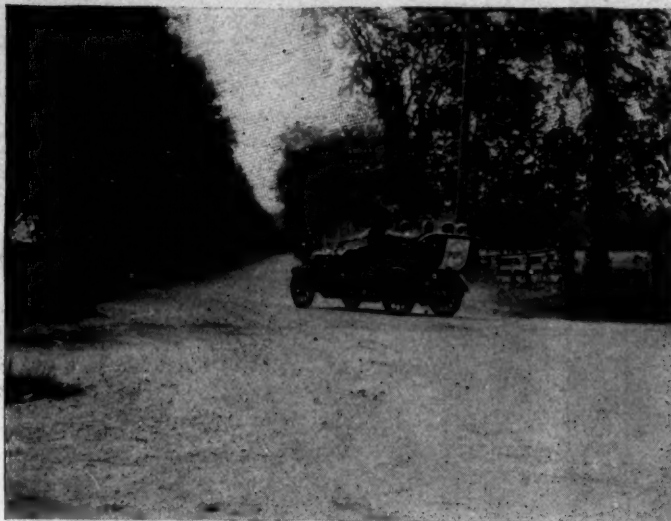
offering the use of his rims to his rivals in both the trial and Vanderbilt race itself has been pronounced a bit too generous. The selfish criticism is that he should have kept his invention for his own use in the trial, whatever patriotism he might show in sharing it with his fellow Americans in a contest against the foreigners. Christie says he has made the change in 48 seconds.

The Pennsylvania Rubber Co. is out with a removable rim, which is on view in its window here. It is along French lines and requires but the removal of four bolts. A replacement in less than 2 minutes is claimed for it by the company.

The New York representative of one of the big tire combination companies tells the writer positively that the French rims will be legally ready to place on cars in the eliminating race, the inference being that negotiations are in progress now with every chance of satisfactory conclusion.

Stories have been afloat that some makers would copy the French rims outright, but the chance of an eleventh-hour injunction against their use would stand in the way of them being safely available.

The first of the cup cars will soon be on the Nassau circuit. Joe Tracy, who will drive the Locomobile, says it will be faster than the Locomobile with which he scored in third place in the last cup contest. Tracy expects to have the Locomobile on Long Island by Saturday next. Duplicate cars are being constructed and both will be placed at his service for selection. Tracy has re-engaged his old training quarters at Lakeville. Sidney Breese, a son of James L. Breese, will drive the B. L. M. car, designed by himself. Work on the eight and twelve-cylinder Maxwell cars is reported to be progressing satisfactorily, and Betz will prob-



TURN FROM NORTH TURNPIKE INTO MANHASSET

ably have both on the road this month. The three Thomas and three Frayer-Miller cup machines are well advanced, and bets have been made that both types will make the American team. Wagers are even said to have been made at 2 to 1 that a Thomas car will win the trial. Caillois and Le Blon, the French drivers of two of the Thomas cars, are expected soon.

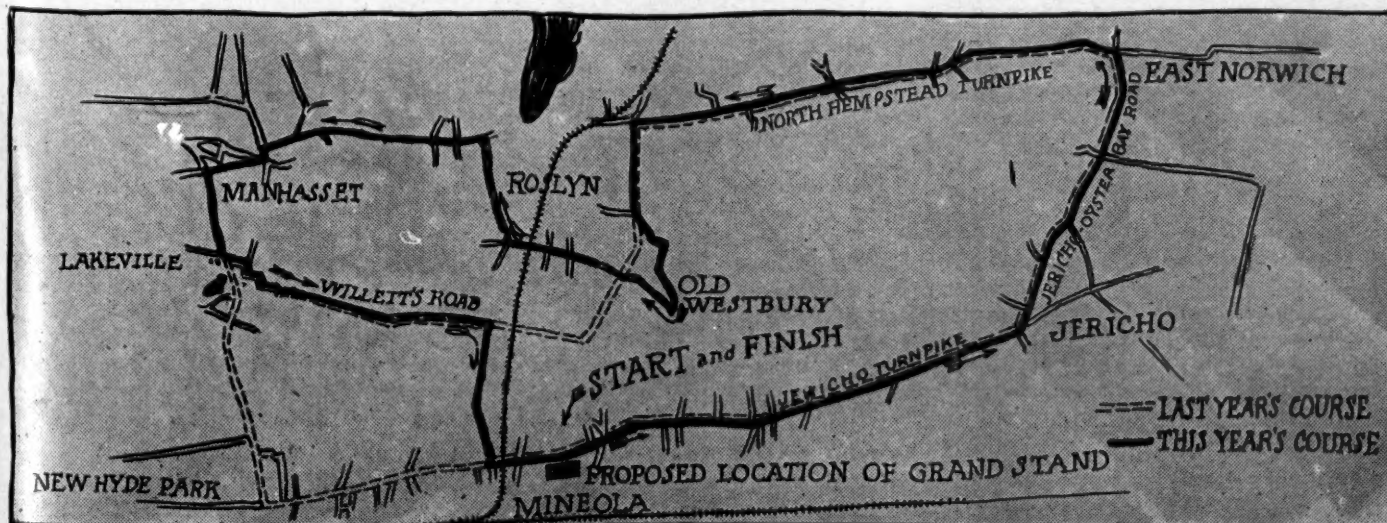
GENERAL FUNSTON TRYING MOTOR CARS

Tacoma, Wash., Aug. 19—General Fredrick Funston, who is in command of Camp Tacoma, with its 7,000 troops, at the American lake district, near here, expects to be able to submit an interesting and valuable report on the use of the automobile during the present maneuvers. There is one car used by the signal corps department, and another, a Royal Tourist, which is used by the general and members of his staff. The signal corps car is not of the ordinary pattern. There is a seat for the driver, but the rear is an open box for the carrying of signal corps impediments. The touring car is of 40 horsepower. Thus far

this has proven invaluable. General Funston uses it to visit camps and watch the maneuvers. The commander of a corps may have his line extended for a distance of 30 miles, and it becomes necessary to get to a distant point in rapid order. He could never expect to do it on horseback. Had the automobile been in existence half a century ago history would undoubtedly have been robbed of some very spectacular rides like that of Sheridan's. Great distances are impracticable for a horse. They can be covered in much less time with automobiles, and with much less fatigue. In the wars of the future, automobiles will be used extensively by commanders of large bodies of

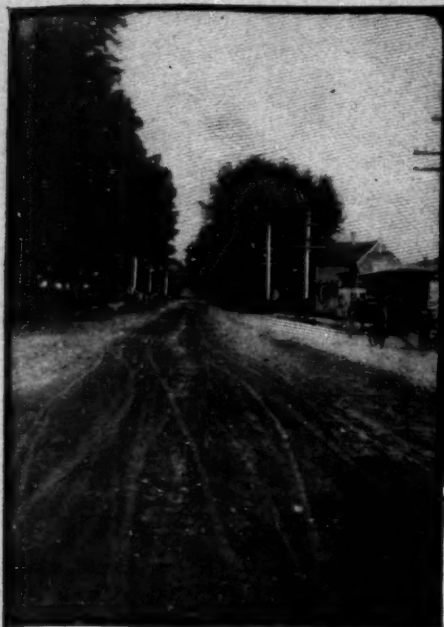
troops, and by staff officers as well. General Funston's report will include the matter of durability and repairs, including whether the latter are made in the field or whether necessary to bring the car to a shop. Its behavior over rough territory, fording shallow streams, etc., will be noted. In fact, the report will be an exhaustive one, and will add materially to automobile as well as military literature.

It is the opinion of some officers that the automobile will prove practical for scouting. The machines are faster than the fastest horse, and can be made practically noiseless if necessary. It is also possible to so paint them that they will harmonize with the surrounding scenery. The automobile is no more vulnerable than the horse. Although it offers more of a mark, it has but few fatal points. A tire may be punctured, and the car still be able to continue along at a fair speed, while with a horse he is apt to be of little service if he is wounded. The army officers here are all greatly impressed with the adaptability of the automobile and General Funston's report is eagerly awaited in army circles.



ROUTE SELECTED ON LONG ISLAND FOR THE 1906 VANDERBILT CUP RACE

CHICAGO'S NEW KIND OF HILL CLIMB



PHILLIPS HILL FROM THE START

Chicago, Aug. 19—Changes have been made in the plans for the hill-climbing contests to be held at Algonquin, Ill., Sept. 6, under the auspices of the Chicago Automobile Trade Association and the Chicago Automobile Club, which will make the event one of the most practical as well as unique events of the kind ever given in this country. The most startling innovation is the announcement made late last week that the formula used by the Automobile Club of Great Britain and Ireland in handicapping climbs would be used at Algonquin, although slightly modified, the crankshaft speed, cylinder compression and horsepower being eliminated from the calculation. The revised formula will be as follows: Cylinder capacity of car multiplied by the time in seconds and divided by the weight of the car without driver or passengers. As if this was not novelty enough, Chairman Gunther and his committee have planned to hold two hill-climbs the same day, one in the morning, from a standing start, and the other from a flying start in the afternoon. The two times will be added together and divided by 2, which will be used for the basis in figuring the handicaps.

Perry hill, originally selected for the climb, was found to be too dangerous for flying start trials, the right-handed curve almost at the bottom being so sharp and poorly banked that there was a chance that some reckless driver would go into the ditch before the day was over. Rather than get such a black eye, the committee went over the proposition, and when it found another hill in the same town was available the plans were altered to take in both of them. It was decided that it would be best to have Perry hill used for the standing start contests, with the after-



TURN ON PHILLIPS HILL

noon events, from a standing start, on Phillips hill, north of the town.

Five classes have been provided for, four of them the same as took part in the recent reliability contest and the other a special event for steamers only. A is for cars not exceeding \$1,000 list price, B between \$1,000 and \$1,750, C between \$1,750 and \$2,500, and D over \$2,500. Necessarily, each car will have to be weighed in before the contests. It is also ordered that the full quota of passengers for each car be carried—four for a touring car and two for a runabout, of an average weight of 125 pounds. Three must start in any event to make it a contest. Timing will be by electric system and entries close Sept. 1 with C. P. Root, 309 Michigan avenue, Chicago.

It is expected that the pioneering attempts of the Chicagoans in adopting a handicapping system of deciding hill-climbs will bear good fruit and place every machine in on an equality. After explaining the formula, the rules go on and say that in determining the cylinder capacity, the bore or cylinder diameter and the length of the piston stroke, both in inches, must be known. Knowing these, the cylinder capacity is obtained by squaring the half of the diameter, multiplying by the stroke and then multiplying by 3.1416. This is the regular formula for finding the cubical contents of any cylindrical vessel. This gives the capacity of one cylinder, which is multiplied by the number of cylinders in the motor. As an explanation of the principle, take a four-cylinder motor with a bore of 4 inches and a 5-inch stroke: Half the diameter, or bore, is 2 inches; two squared is 4 inches, and this multiplied by 5—the stroke—becomes 20; multiplying by 3.1416 is 62.8 cubic inches, the cubical capacity of one cylinder. To obtain the capacity of the four cylinders, multiply by four. The total capacity is 251.2 cubic inches. The capacity known; to determine the contestant's marks, multiply this by the num-



NEARING TOP OF PHILLIPS HILL

ber of seconds required in climbing the ascent and divide the result by the weight of the car in pounds. The car having the lowest merit mark in each class is adjudged the winner.

Phillips hill, is the name of the incline selected for the afternoon contest, and its existence was not known to the committee when it went on its investigating tour the first time. If it had been, it is more than probable Perry hill never would have been given a second thought. Chairman Gunther made a second trip out there last Friday and discovered an incline that is far better adapted to a climb than the other. It is to the north of the town and in reality is part of it. It starts from in front of the Morton house, which is located in the heart of the town. It's probably a quarter of a mile before the grade begins. It's a broad, wide street and in good condition. It was decided that the cars shall have about a quarter of a mile to work up speed, which should enable them to hit the grade with full power on. After passing the tape there is a straight climb of some 500 yards before the road develops into a gigantic thankyma'am, about 175 yards in length. Then comes the gentle turn, an easy bend to the left, which should not bother anyone. This keeps on turning and going up, and about the middle of this is a fork in the road, one turning to the right and the other inclining a trifle to the left. It is this latter the climbers will take, the road branching into the open country at the top. This curve part is about 225 yards in length.

In all, the entire course is 900 yards in length, almost twice as long as Perry hill. The latter, however, is steeper and harder to negotiate because of the two stiff turns.

It is also steeper. It is doubted if any can climb Perry on the high, but Phillips hill ought to be conquered on the direct drive by some of the big cars and fast time ought to be made, too.

It is anticipated that the hill-climb will bring together the largest turnout of motorists ever brought together in the state. The Chicago Automobile Club, which is a partner in the enterprise, has called a club run to go out there the night before the climb. Chairman Gregory, of the club's runs and tours committee, has named the fountain on the south drive of Garfield park as the rallying point from which the motorists will start at 4 o'clock on the afternoon of September 5. The tourists will drive to Elgin for the night, Algonquin being so close it will be possible to run over there early in the morning in time for the standing-start climb.

HIGH PRICE FOR GASOLINE

London, Aug. 11—The gradual but continuous rise in the price of gasoline here is disturbing motorists somewhat. A couple of years ago the price was 16 cents a gallon, today the public is paying in London 36 cents and in other parts of the country as high as 40 to 45 cents a gallon, and it is asserted that 1907 will see a still further advance. Ostensibly, the supply here is obtained from half a dozen different distillers, but it is practically certain that these distillers are entirely governed by the Standard Oil Co.'s prices for the crude supply, if not really obtaining the distilled product from that concern. The effect which this continual rise will have on the commercial side of automobilism is so great that it is probable that in the near future some organized attempt will be made to devise either an alternative fuel, or some method of treating petroleum so as to enable its offensiveness to be obviated.

TO ABSORB KOBUSCH

St. Louis, Mo., Aug. 20—The St. Louis Car Co. has made arrangements to absorb the Kobusch Automobile Co. and will operate the latter concern as a part of the car plant. Arrangements are already being made for the merger, and as soon as it is effected the management will be in a position to announce the absorption. The St. Louis Car Co. controls the stock of the Kobusch company, George J. Kobusch being the dominant factor in both concerns, so the consolidation will be effected without much difficulty. The automobile company was originally a part of the car company, so the new arrangement will be merely a return to first conditions. The automobile company manufactures the American Mors car, for which it has exclusive manufacturing rights in the United States.

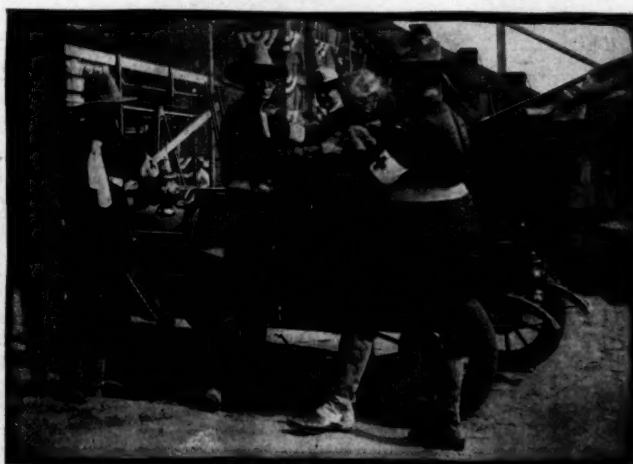
IN RED CROSS SERVICE

Automobiles Play Prominent Part in National G. A. R. Encampment at Minneapolis

Minneapolis, Aug. 19—Minneapolis automobilists last week contributed a feature to the national encampment of the Grand Army of the Republic which has never before been offered by any encampment city visited by the old soldiers. For several days the automobilists of the city were under a regime almost as strict as that which existed at San Francisco, and machines dashed back and forth over the down-town streets with Red Cross flags at the heads, and with old soldiers filling the tonneaus and every corner of the cars. The automobile owners of the city are today receiving the thanks and praise of every citizen of Minneapolis, and of every one of the 205,000 visitors who thronged the city last week. The old soldiers, who gathered in thousands in the city, passed resolution after resolution, and then were not fully satisfied with the thanks they had given the automobile owners.

The enthusiasts of the city furnished enough Red Cross ambulances so that one could be stationed on practically every crossing over the whole 2 miles of the immense parade last Wednesday; they kept machines constantly in service, day and night, for the Red Cross work, and probably saved the lives of many old soldiers who were prostrated by the heat, and whose speedy transportation to the emergency hospital gave them immediate medical aid.

The Automobile Club of Minneapolis gave practically every machine on its rolls to the use of the old soldiers during a part of the week. Colonel F. M. Joyce, president of the club, posted requests in the automobile club rooms, in the Commercial Club rooms, and had them published in the papers, asking every member of the club to pick up veterans wherever they were to be found, and to give at least a part of every day to show the visitors about the city.



RED CROSS CAR AT EMERGENCY HOSPITAL

Hundreds of machines took part in this work. Members of the Chamber of Commerce marshaled their machines every afternoon, and turned them over to the soldiers, to show them the beauties of the town. Cars were placed at the disposal of the officers of the grand army, and were furnished for every conceivable purpose. The Red Cross work of the encampment is pronounced by the grand army officials as the most effective ever prepared for any of the national encampments. The automobiles were given a clear right of way up and down Nicollet and Hennepin avenues during the parade, shooting alongside the soldiers on the wide avenues without danger to the marchers. Each machine carried two Red Cross men, who had stretchers to carry those who were injured or gave out under the heat. The management of the entire organization was perfect, and so well were the machines handled through the crowds and along the line of march, that there was practically not an accident during the week.

ELECTS NEW DIRECTORS

Chicago, Aug. 20—At the annual meeting of the Illinois State Automobile Association held in President Gorham's office today six of the nine clubs in the organization were represented, the following directors being chosen for the ensuing year: Joseph H. Francis, Austin Automobile Club; S. P. Irwin, Bloomington Automobile Club; John Farson, S. S. Gorham, Ira M. Cobe and J. F. Gunther, Chicago Automobile Club; George W. Erhart, Decatur Automobile Club; C. H. Cobb, Kankakee Automobile Club; A. J. Olson, McHenry Automobile Club; R. A. Whitney, Peoria Automobile Club; G. K. Barnes, Rockford Automobile Club. There will be a general meeting of the association called for Wednesday night, September 5, at Algonquin, Ill., so there will be a strong representation at the hill-climb the next day.

NEW MILWAUKEE CARS

Milwaukee, Aug. 19—Milwaukee is coming to the front in the manufacturing line, two new automobile concerns being in the field. The Eagle Automobile Co. already has its first car on the road being tested. This is a friction-drive car with double-opposed motor and rated at 13-15 horsepower. The car will have 98-inch wheelbase and the hood will be made long, as on modern roadsters. The seat is well back, so that the car has the appearance of a modern high-powered roadster. The car is to sell for \$800 and the company expects to build 300 for the 1907 market. The Automobile Transit Co., at Fourth and Wells streets, is to bring out a light delivery wagon for commercial purposes, selling between \$1,200 and \$1,500.

FAIR, SAYS JOHN BULL

English Business Hardly Up to Expectations, Although Few Cleared Immense Profits

London, Aug. 11—For some time past rumor has been busy with the affairs of the Argyll company, a Scotch concern which has had such a phenomenally successful career that it last year laid down huge works near Dumbarton on the Clyde, from which it was estimated that about eighty cars per week could be turned out. Gossips have had it that the result of the year's trading has been unsatisfactory, in that the largely increased output was apparently difficult to sell, and that in consequence there were internal dissensions of the usual kind in such matters, and that the situation was becoming strained. As these rumors were having a decided effect upon the public value of the shares of the concern, the board last week issued an official denial and explanation bearing on the more important suggestions contained in the rumors.

It seems that out of 1,200 workmen employed, 200 were recently discharged, which is attributed to the end of the season's operations and the interregnum between those and the 1907 patterns. It is pointed out that the balance sheet of the company will disclose that the present year's trading has been the largest and most successful in the history of the concern, the turn over showing an increase of 60 per cent, while very close to \$2,000,000 worth of cars are even now on order to be delivered in 1907. The issue of this document to the shareholders has gone a considerable way towards allaying uneasiness, and it has directed attention, at the same time, to the fact that, taken all round, the season has not been what everybody expected.

The phenomenal results secured by two or three companies last year to some extent inflamed the imaginations of rivals with expectations of what should accrue this year. The result of this has been that, although a fair season's trade has been secured, everybody expected so much more that the increase over 1905 has scarcely appeared satisfactory in the majority of instances. There are, however, at least two known exceptions: One of these is the Daimler company, which is said to have made a profit of about \$1,000,000 for this season's trade, and the Humber company—which also manufactures bicycles—the profits of which are said to amount to \$650,000. Then, of course, comes the Argyll, the Wolseley and the Napier, beyond which it is doubtful if any great profits have been made by manufacturers. The peculiar feature about these outstanding successes is that the Daimler has made its profits on a single type of high-powered car, the chassis of which sells at \$3,000, while the Humber

has made its profits on a car of low-power selling at just over \$1,200, which would go to show that by marketing a single type and doing it well profits can be earned. Yet, strangely enough, the Daimler people are now going to market a low-powered car—a 14-18-horsepower, with cardanshaft transmission—to sell at a low price; while the Humber concern is struggling with the initial stages of the manufacture of a six-cylinder, 30-horsepower car to invade the high-priced market the coming season of 1907.

The Dunlop Tire Co. has been appealing to the law courts here for leave to reduce its capital from \$20,000,000 to \$8,500,000, and the sanction was granted yesterday. The most interesting feature of the case, however, was that it was disclosed in evidence that this huge concern, on its own trading, actually suffered a loss of \$12,000 last year, although very considerable profits were shown on the balance sheet and dividends were paid to the ordinary and preference shareholders. These profits, however, were earned by subsidiary companies owned and financed by the concern. A fact of this nature throws an interesting side light on the trading conditions on this side, and explains how it is that foreign concerns are unable to get anything like a good standing on our cycle and motor tire market.

It is believed that the Pope company is now engaged in the endeavor to obtain a satisfactory London West End premises in which to open a depot. There was a time when such a proceeding would have created alarm here, but comparatively little notice is taken of it, as it is considered that, with the market here in its present condition, and manufacturing conditions as they are in America, the Pope people cannot cut into the business of the established British and Continental concerns. Still, that is a matter on which the Yankees undoubtedly have their own opinion, else they wouldn't plan opening on this side.

ROAD RACE DERBY OFF

Rochester, N. Y., Aug. 20—The American touring car derby, which was being promoted by the Rochester Automobile Club and the New York State Automobile Association, has been abandoned by them. The arrangements for the race had practically been concluded. A course 25 miles long on the famous improved highways of Monroe county had been mapped out, and it was intended to cover this four times to make it a 100-mile race. There are several railroad crossings along the roads and the consent of railroad officials to stop trains during the progress of the race had been obtained. The consent of the highway commissioners of the various towns had also been obtained. The club had also engaged Senator W. J. Morgan to manage the race, but the manufacturers failed to enthuse over the proposition, entries being scarce, the club decided to give up the idea for this year at least.

WILL HAVE FALL MEET

Atlantic City Automobile Club to Promote Races on Ventnor Beach Next Month

Atlantic City, N. J., Aug. 20—On Friday night last the Atlantic City Automobile Club decided to hold its annual fall meet on the Ventnor beach course, September 3, 4 and 5. Many entries have already been received for the various events, among them being those of S. B. Stevens and Webb Jay. The former will drive the 80-horsepower Darracq which lifted the Vanderbilt cup last year, and the latter, of course, will enter a White steamer. The entry list for the various touring car events are already so numerous that trial heats will be in order in almost all of them before the field will assume manageable proportions.

A serious defect in the new boulevard came to light at the coroner's inquest into the recent fatal accident at the bridge over Fish creek, one of the streams that meander over the 5 miles of swamp land separating this resort from the mainland. The boulevard itself is 60 feet wide, and the bridge but 20 feet. At night a car moving at even ordinary speed is sure to get into a mix-up unless it is in the middle of the road. The bridge approaches are painted lead color, a peculiarly invisible tint on a cloudy night, even with powerful headlights. Another bad feature is a ridge where the bridge planks begin—a hump which is liable to jerk a wheel around in a chauffeur's hands unless he has a very firm grip upon it. This combination was doubtless responsible for the fatality, and the jury censured the county's board of freeholders for not having lights on the bridge and its approaches. An electric lighting concern has been given the contract to place 60 powerful arc lamps along the boulevard, and the bridge approaches will be painted white, in the hope that future accidents at this point will be impossible.

Despite the difficulties with the constables in the "hinterland," this resort still continues to be the Mecca of automobilists from every city and town in the east. Saturday and yesterday fully 750 cars were driven into town; these, with the machines of those spending the season here and of residents, constitutes an army of at least 1,500 automobiles. The city's main avenues presented the appearance of an automobile parade, so constant was the procession of cars. Indeed, the stream of automobile traffic has become so thick and so constant that the city police officials have stationed mounted officers to keep the more reckless of the throng in subjection. The foot "cops" have become useless, the automobilists giving them the laugh when ordered to stop or slow down. Things are different now.

The trade is so well represented here

now—this is the height of the season—that the uninitiated would imagine that some sort of an automobile congress was in session, and long-distance tourists are so common that they are no longer the subject of remark. Some of last week's arrivals from distant points include: F. F. Bramley, of Cincinnati, in a 35-horsepower Pope-Toledo. He consumed but a trifle over 5 hours in coming down the coast from New York. Mrs. Ivy Lagrove, of New York, came in with a similar car—her second. J. J. McClellan, of Washington, D. C., has his 30-horsepower Stevens-Duryea here for a long stay. C. C. Budd, of Paducah, Ky., is doing the shore resorts in a 35-horsepower Peerless. H. L. Motter, in a Stanley steamer, and Chester Myers, in a White, brought down a big party from York, Pa. J. M. Britton safely ran the gauntlet of the constables in his 25-horsepower Locomobile, although his total time was dangerously close to the limit. Samuel Seifert, also of Reading, followed in a 35-horsepower Pope-Toledo. F. H. Bartlett, of Chicago, is resting after his long drive from the Windy city in a 60-horsepower Thomas. W. W. Blake, of Altoona, Pa., made the trip from home in 2½ days in a model K Winton, and W. A. Johnson, of Latrobe, Pa., came in a few minutes later in his 32-horsepower Cadillac, followed by V. D. Williamson, of New York, in a C.-G.-V.; H. G. Begal, of Pittsburg, in an Elmore, and C. H. Gorley, of Uniontown, Pa., in a four-cylinder Franklin. H. Alden, of New Haven, Conn., made a fast trip down the shore road in his 35-horsepower Locomobile, as did H. H. Curtis, of Plainfield, N. J., in his 50-horsepower Mercedes.

LIEDKERKE CUP RESULTS

Paris, Aug. 15—Special cablegram—Wilhelm, driving a Metallurgique, won the Liedekerke cup run Tuesday over a 267-mile circuit in the Belgian Ardennes circuit. It was a contest for touring machines only, somewhat similar to the Targa Florio which was won by Cagno, and Wilhelm covered the distance in 5 hours 27 minutes 38 seconds. Perpere in a Germain was second and Moore in a Minerva was third, Baron de Caters in a Germain was fourth. Perpere made the fastest round, doing the 53 miles in 1 hour 3 minutes 46 seconds.

PRIZES FOR A PARADE

Chicago, Aug. 20—The Oak Park Horse Show Association has issued invitations to local motorists to take part in an illuminated automobile parade to be held the night of September 7. Frank X. Mudd had charge of the affair and he has enlisted the services of the Chicago Automobile Club. Two silver cups are offered for the best illuminated cars. Mudd is counting on having several hundred cars in line. He has arranged with some of the battery companies to wire the cars and rent electrical devices for the evening.

RAISE RATES ON PIKE

Almost Prohibitive Prices Demanded of Quakers for Use of the Lancaster Highway

Philadelphia, Aug. 20—The long-suffering automobilists of this luckless burg are "up against it" again. This time it is the toll evil. The officials of the Lancaster pike—the president of the company, by the way, is A. J. Cassatt, of the Pennsylvania railroad, which parallels the pike—have recently added a modest 100 per cent to the stiffish charge which formerly obtained, and now there is blood on the moon. "Outrage!" "Imposition!" "Trying to even up for the Pennsy's recent reduction to 2 cents a mile!" are some of the more moderate outcries heard by the bedeviled gate-keepers, who are merely obeying orders, but upon whose heads anathema, ridicule and sarcasm have been showered by the indignant motorists, who have no other means of relieving their feelings. But they pony up, all the same. The new schedule is a sliding one, based upon the number of passengers the car is designed to carry. Beginning at 16 cents for 5 miles for runabouts seating two, the charges rise to 35 cents for six passengers for the same distance. The new rates apply only to the best section of the pike, from City Line to Paoli—14 miles—but they are heavy enough to mean a very pretty penny when the amount of automobile travel over the road is taken into consideration. The following table will give an idea of how the long-suffering Quakers are now being soaked:

Miles	City line to	2 Pass.	4 Pass.	6 Pass.
5....	Bryn Mawr.....	.16	.26	.35
8....	St. David's.....	.24	.40	.53
11....	Devon.....	.34	.56	.75
14....	Paoli.....	.42	.70	.93

In other words, a runabout trip on the pike costs 3 cents a mile; a four-seater, 5 cents a mile, and a car seating six, about 7 cents a mile! There are eight gates in the 14 miles; and if the automobilist in a runabout intends to go to Paoli or to any of the intervening points he pays according to the schedule. If he merely passes one gate, it costs a dime a gate. There are no printed charges for a short distance. If, in order to reach a residence on the pike, he is compelled to use but two or three blocks of it—and passes a gate—it costs him 10 cents just the same. A car seating six was sent out to Paoli by a local paper, and the toll charges for the round trip were just \$1.86 for the 28 miles! Just consider that, you growlers against toll charges elsewhere, and forever hold your peace!

The insinuation that "the Pennsy needs the money" is based upon the well-founded suspicion that the railroad owns the pike. Compared with the rates now in force on the other well-traveled pike roads leading out of the city—and they are steep enough—the Lancaster pike

charges are actually mountainous. The Old York road, the Montgomery and the Germantown & Willow Grove pikes have a straight 3-cents-a-mile rate, with a minimum short-distance charge of 5 cents per car, and no extra tariff for a six-passenger machine.

The Automobile Club of Philadelphia, the Motor Federation of Pennsylvania and the recently organized Automobile Manufacturers' and Representatives' Association are preparing to combat the new schedule, and the first move will be an effort to get the township commissioners of Lower Merion to take action against this new "hold-up." The first 6 miles of the pike run through that township.

ON FRENCH ROADS

Washington, D. C., Aug. 20—Some very interesting information about the excellent roads in France and the government method of maintaining them has been received by the federal government's road bureau, from which it appears that France had wretched roads in former times, and this notwithstanding the good example left by the Roman occupation. Indeed, highroad accidents were a favorite stock in trade of the old romancers. Now the roads are not only nearly perfect and good at all seasons, but are beautified by artistic stone bridges and frequently lined with fruit and shade trees. Spasmodic efforts were made to better the roads, mostly around Paris, under Louis XIV in 1643-1715, but it was not until about 1775 that the serious work of building great roads of national extent was undertaken, and Napoleon I carried it forward vigorously as a part of his military schemes, uniting frontier points with the capital. Never has the work ceased, except during periods of war, and the more difficult sections, at first left to a more convenient season, are steadily being built, while new cut-offs and connecting links are continually being declared open for service.

REO PAYS DIVIDENDS

Lansing, Mich., Aug. 20—That the Reo Motor Car Co. is in a prosperous condition is evidenced by the fact that the company paid another 10 per cent dividend on August 15, the third 10 per cent dividend the company has paid this year. The present capacity of the plant is inadequate to take care of the business. The plant now is able to turn out 120 completed machines per week but this is not enough to meet the demand and additions are even now in course of construction by which the capacity will be increased at least one-third. Two more boilers and another engine will be added to the power plant, while some of the other buildings will be enlarged and new stock rooms erected. The company has just accepted one of the largest orders ever received from a single agency in the United States. This order is for fifty-six touring cars and fifty-six runabouts, all to be shipped before November 1.



MOTOR AGE

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DANGEROUS PLACE: GUARDIANS


 CHICAGO appears to be the home of the tire-shooting policeman, for he has made his appearance on all sides of the city and has stirred up not only the automobilists but other citizens as well. The last case was that of a park policeman who stopped an automobilist by means of a bullet. But it was found he was not warranted in this action and as a result of a vigorous campaign of complaint the policeman is now looking for a job. In this case the motorists did good work. The chief of police of Racine, Wis., now wants a little motorist and has given orders to his men to use bullets to stop speeding automobilists, contrary to good sense and to law. That man is not a safe guardian of the peace; he is a rioter and should fare the fate that any other rioter might deserve. There is ample opportunity for the automobilists of northern Illinois to join the motorists of southern Wisconsin to place this foe of society where he cannot do damage to either life or property or disgrace the city which he apparently misrepresents.

GASOLINE AND ALCOHOL

 THE AUTOMOBILE industry and the automobile pastime are threatened with annihilation, and it is apparent that only the manufacture of denatured alcohol will save them. The Standard Oil Co. controls the gasoline supply of the world, and as a result the price of this fuel in London is today about 36 cents a gallon and anywhere from 40 to 45 cents a gallon in other parts of the British Isles. Apparently denatured alcohol is the only remedy for this burden, which is constantly growing. A couple of years ago the price of gasoline in England was but 16 cents a gallon, about the price in this country today. What happened to England will happen to this country unless alcohol is made in such quantities as to keep down the price of gasoline. Leaving aside the question of the pleasure car and that portion of the industry it supports, it must be remembered that the commercial side of


the motor car is a most important factor and one that is becoming more important daily. The users of commercial cars will increase in number each year and a decently cheap fuel will be needed. All the facts that were presented in favor of the passage of the free alcohol bill are being borne out—the Standard Oil Co. is making good all the charges laid against it. It would appear that there is soon to be a wide market for denatured alcohol, alcohol carbureters and alcohol motors.

GRAFTING OFFICIALS

 AS A RESULT of all that has happened during the past year or two between the authorities and motorists over violations of speed laws, with the consequent drastic attitude of the authorities in many parts of the country toward all motorists, regardless of any consideration of facts, it has been proposed that the time has arrived for motorists to begin protecting themselves. Not a week passes that some story is not told of speed traps being laid for the purpose of squeezing a few dollars out of the pockets of automobilists for the benefit of grafting petty officials, whose prey is the automobilist alone. Motor Age has been a consistent advocate of obedience to all laws, although in places and at times they may appear to be unfair and even illegal, but it cannot support the attitude taken by the grafting official who, simply because he is clothed with a little authority, undertakes to heap abuse on one class of citizens using the public highway. There have been indiscriminate arrests of motorists aplenty throughout the United States, even during the past year, when

motoring has passed the stage of being something new and novel, and an analysis of most of the cases shows that graft was at the bottom of most of the trouble. The Glidden tourists were mulcted at a little place called Lima, but enthusiastic and earnest motorists in that locality took the matter in hand and are on the trail of the petty grafting officials. Decent automobilists will not fight legitimate arrests, but they will fight grafters, and the man who sets a speed trap and possibly invites an automobilist to break laws is a grafter. So, also, is the official who arrests a motorist because he happens to give warning to another motorist of a speed trap that has been laid. There is nothing criminal in warning another not to break a speed law, and the suggestion that motorists adopt some sign of warning might be adopted with good results; it would, at least, help dispose of the grafter. Cases have been reported where officials have apparently offered inducements to motorists to let out a few notches in speed simply for the purpose of having grounds upon which to make arrest and mulct somebody for a few dollars in the form of a fine. Warning signs may not eliminate the abuses heaped upon motorists by these grafting officials, but they may help to discourage such tactics. The grafter will not be suppressed as long as there is a chance to make a dollar in an easy manner, but as the automobile becomes more general in use and the automobilist refuses to submit to abuse on the part of dinky and narrow-minded officials the grafter will have to shut up shop and earn his dollars honestly. The question of a signal to be given is one that should be carefully considered, lest its adoption bring upon automobilists severe criticism from the public.

PROFITS IN MANUFACTURE

 EPORTS from England are not such as to induce capital to invest any great amount in the automobile industry, for only four companies have been able to show decided profits for the past year. The showing of these four, however, was such as to convince the close student that the fault was not with the automobile, but rather with the policy pursued by the makers themselves. There seems to be a difference between this country and England in this regard, for where the successful makers were those who made but a single model, regardless of price, there are several American makers who have put out a variety of models and have had successful business. It would appear, however, that the maker of the single model must naturally be in the better manufacturing position, in that all effort may be directed toward one model, as to design, manufacture and selling, with no excuses to offer for turning out a number of models. On the other hand, it may prove that the trade will require a manufacturer to build several models.



JUMP & SPARKS

The Week

Change made in Packard agency in Chicago. W. B. Johnson and W. L. Delafontaine getting it; Pardee-Hamill Co. after another big car.

Nassau county supervisors grant road race permit; commission meets and maps out another Vanderbilt cup route for 1906 contest.

Heads of departments in Franklin factory fill seventeen cars and take short tour; Pope company employees hold annual picnic.

English business for 1906 reported to be hardly up to expectations, although two or three firms made immense profits.

Automobiles play prominent part in national G. A. R. encampment at Minneapolis, many cars being in Red Cross service.

Buick transcontinental party making rapid progress toward Pacific coast, being in Nebraska when last heard of.

Chicago decides to have double hill climb at Algonquin and also to use new formula for handicapping contestants.

L. L. Whitman, in six-cylinder Franklin, breaks transcontinental record, doing 15 days 2 hours 12 minutes.

Atlantic City Automobile Club decides to hold its annual fall meet at Ventnor beach September 3, 4 and 5.

Almost prohibitive toll demanded of Philadelphia automobilists for use of Lancaster highway.

Rochester's automobile derby road race declared off because of scarcity of entries.

A double hill-climb sounds like a two-ring circus.

The noise from Long Island listens like a road race.

Old Sol, out Chicago way, at least, is setting a Sziszing pace.

Glidden better hurry up that trophy decision or somebody will add 13 and 10 on him.

They must be feeling the strain in New York these days, for they are going to have an economy test there next month.

Minneapolis got off a new stunt with its Red Cross work in connection with the G. A. R. encampment. Another nail in the motorphobe coffin.

Rochester oughtn't to get sore because the manufacturers would rather sell their cars than race them—automobiles really are made to sell.

Even if the Buick does get across in less than 15 days, Whitman will still hold the San Francisco-New York record. Buick can't lose, though—it'll have the New York-Frisco mark, anyway.

Coming Events

August 29-September 1—Endurance run, New York, Albany, Springfield, New York. New York Motor Club.

September 1-8—Canada international exhibition, St. John, New Brunswick.

September 1-10—Auvergne cup competition, France.

September 3, 4 and 5—Annual fall meet on Ventnor beach, Atlantic City, N. J., Atlantic City Automobile Club.

September 6—Hill climb at Algonquin, Ill., Chicago Automobile Trade Association.

September 9-20—Automobile meet of Palenka, Italy.

September 15-16—Mount Ventoux hill climbing competition, France.

September 17—Tourist trophy race, Isle of Man, A. C. of Great Britain.

September 18—Touring car competition of Provence, France.

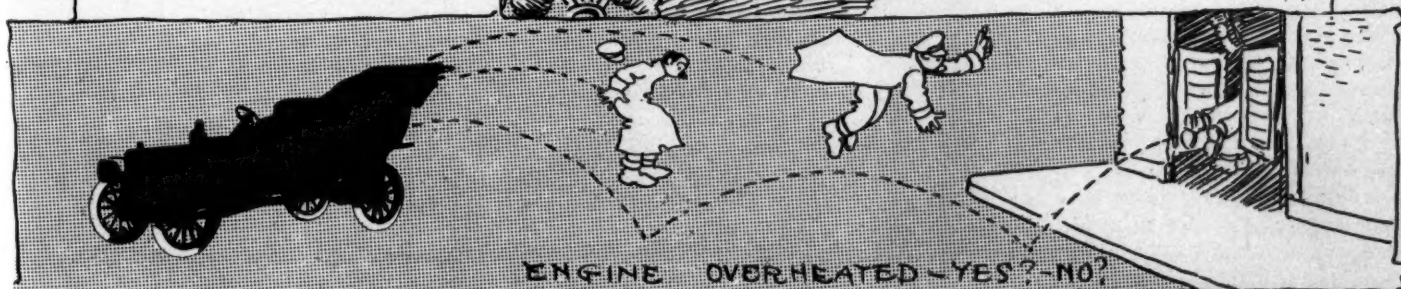
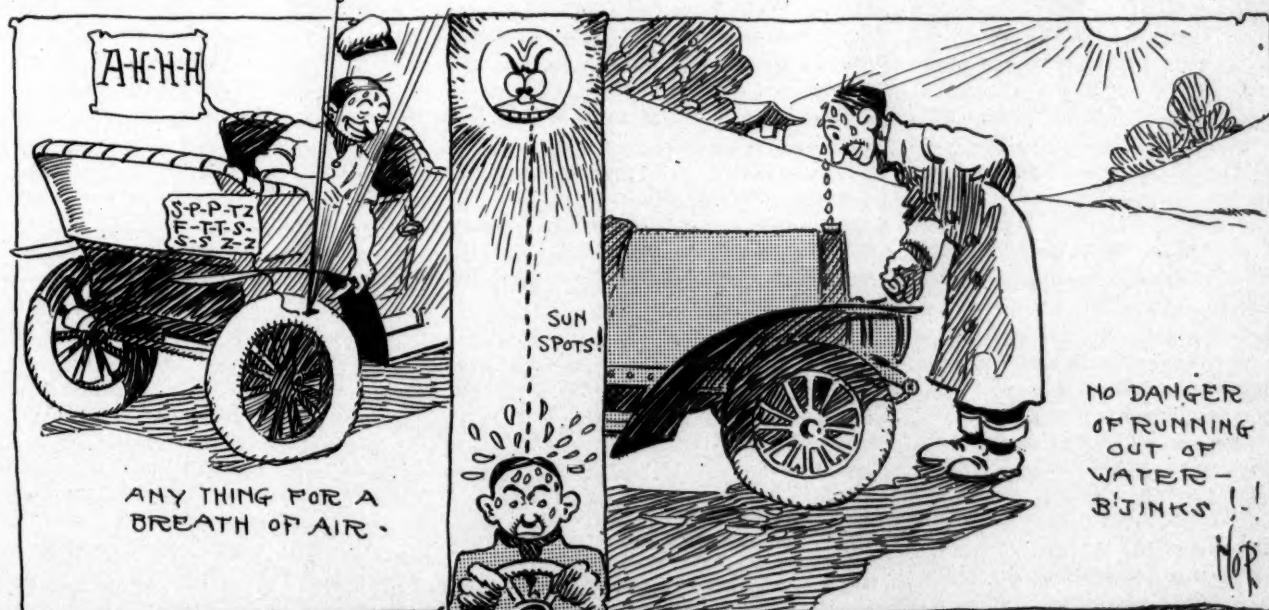
September 22—American eliminating trial for Vanderbilt cup.

September 23—Semmering hill climbing competition, Austria.

September 23—Auto-Cycle Club of France cup race.

October 1-2—Automobile parade and carnival, St. Louis Automobile Club.

October 6—Vanderbilt cup race, Long Island. American Automobile Association.



PARDON THE EFFORT OF THE MOTOR AGE CARTOONIST—IT IS THE RESULT OF AN OVERHEATED BRAIN

FACTORY PEOPLE ENJOY OUTINGS



FRANKLINITES ASCENDING ORAN HILL



COLLECTING TOLL FEES FROM FRANKLINITES

The associated heads of departments of the Franklin factory recently took a long tour, for which seventeen cars were furnished by the Franklin company, through some of the picturesque and historic regions of central New York. Leaving the works at 1 p. m., the long line of air-cooled cars wound its way through the streets of Syracuse to Clinton square, in the center of the business section of the city. After posing for a photograph, the line of travel led the procession out of the city by way of the old Fayetteville toll road, past the Country Club, and through the little hamlet of Orville; thence on through the beautiful towns of Fayetteville and Manlius. Leaving Manlius and passing St. John's military academy, the party stopped a few moments at Edward's Falls, a favorite local picnic resort. No section of the United States abounds more plentifully in toll roads, most miserably kept, than does central New York. Here at a toll gate the whole line of Franklin cars, carrying some sixty people, were compelled to "lay up" until the keepers could count their revenue. This is but one of many similar impositions to which the suffering public in the Empire state is subjected on account of the toll roads. On through the gate the long line of Franklins finally moved and began the ascent which should place them at Cazenovia, some 900 feet elevation above Syracuse.

Just before reaching the hamlet of Oran may be seen the relics of an old Indian fort, which lies in plain view from the road. This fort is in the form of a horseshoe and marks the spot of one of the fiercest battles in the history of the central New York Indian tribes. After a run of a little more than an hour from the time of leaving Syracuse the summit was reached. Stretching away to the east could be seen Cazenovia lake, on the shores of which are many beautiful residences, the homes of some of New York's wealth-

iest people. Looking back toward the west were the hills beyond which lay Syracuse. It is a view which a well-versed traveler has pronounced unexcelled by anything abroad. The town of Cazenovia occupies land bought from the Indians by Jan von Lincklaen, a native of Holland, who settled on the shores of this beautiful lake in 1792. The village was named after an Italian, Theophilus Cazenore, who was the first American agent of the Holland Land Co. About this lake game abounded in plenty—deer, otter and bear, while wolves were held for bounty at \$20 per head. It is said that Talleyrand, the famous French statesman and counselor for Napoleon, found refuge here when compelled to flee from France. As late as 1861 an Indian canoe filled with stones was raised from the bed of the lake, which, tradition has it, was sunk over 100 years before during one of the great Indian battles. Later, and with befitting ceremony, this canoe was lowered again to its former resting place by the people of the surrounding countryside.

Passing through the quiet village of Cazenovia, the Franklin cars took their way north toward Chittenango. The road winding down the gorge, cut through the hills by the Chittenango, is one of the prettiest in central New York. It descends rapidly and because of its smooth, macadamized surface offers a most delightful coast for nearly 10 miles. At Chittenango Falls the party halted. Here is as pretty a piece of nature's work as one might ever care to see. Dropping 136 feet, the water churns itself into a milky white foam, while through its spray the rays of the afternoon sun play, forming most exquisite rainbows. Leaving Chittenango Springs, a short run brought the tourists within the quiet town of Chittenango. On through the village the route lay, and having emerged from the gorge the next 10 miles to the shores of Oneida lake were

over a flat and uninteresting country. Coming in view of the lake, a sharp turn to the left was made and the scenery grew more interesting as the road wound through the well-kept farms that border the lake shore. Eight miles farther and the party drew up at South Bay, where Mine Host Crownhart served a bountiful dinner, an appetite for which had been whetted by several hours of uninterrupted pleasure viewing the beauties of nature's great out-of-doors.

Within the confines of Oneida lake is a beautiful little strip of land known as Frenchman's Island. Local history has it that in the early part of the nineteenth century a white man took up his abode on this island, which was then unknown except to the Indian tribes. A stockade was built and here the pale face lived in friendship and at peace with the redskins about him. One day a courier came and suddenly preparations were made for a speedy departure; and, as tradition tells the story, this white man was received at New York by a French man-of-war, and further, that he was a member of the royal family, who had been compelled to flee from France seeking protection in a foreign land. Thus this island derives its name. The run of 13 miles into Syracuse was quickly made, completing a most enjoyable afternoon's trip.

POPE COMPANY'S PICNIC

Following their annual custom, the big army of employes of the Pope Mfg. Co. had its picnic last Thursday, Salm Rock, near New Haven, as usual, being the rendezvous. Everybody joined in the merry-making, the heads of the firm going in for the fun as quickly as the smallest officeboy. It took thirty automobiles, each one loaded to the guards, to carry the picnickers. The car ride, however, was merely incidental to the picnic, for once at the

summer resort all kinds of skylarking went on. The powers that be—Albert L. Pope, Colonel George Pope and Wilbur C. Walker—cast dignity to the winds and plunged into the water and splashed around with the rest of the Pope aggregation. Baseball games, foot races and other sports gave everyone a sharp appetite for the big spread that topped off the day. Then came the ride home.

BUICK GOING FAST

Chicago, Aug. 22—Leaving New York at 3 o'clock last Thursday morning the Buick transcontinental record-breaking party is now speeding over the Nebraska roads with fair prospects of beating the 15 days' record only recently established by L. L. Whitman in a Franklin six-cylinder runabout. The Buickites are traveling westward instead of east and it remains to be seen whether or not it was advisable to use up the good going first. Still, War Correspondents Little and Hagerty believe the two-cylinder touring car they are in is capable of standing the hard knocks of the far western highways and are confidently counting on chipping the Whitman mark by about a day. The Buick party had enough tire troubles between New York and here to discourage any but war veterans like Hagerty and Little, but despite these setbacks they kept plugging, getting into Chicago near midnight Saturday night, after consuming 67 hours 43 minutes on this part of the journey. An hour's stop here and then the Buickites resumed their flight. Last night they checked in at Central City, Neb., where they took an hour's rest, then headed for Kearney, Neb.

PACKARD CHANGE IN CHICAGO

Chicago, Aug. 22—Local trade circles were astonished today when it was announced that there had been a change made in the Chicago agency of the Packard and that the Johnson part of the Pardee-Johnson-Hamill Co. was out. The Pardee company has long been the Packard representative here, but when 1907 business was being booked it came out that Dr. W. P. Johnson, who has just dropped out of the Pardee company, and W. L. Delafontaine, an ex-employee, had secured the Packard agency. Mr. Pardee and Mr. Hamill, the remaining partners, will continue as the Pardee-Hamill Co. and will take the agency for one of the big cars, the details of which deal are not ready for publication. The company also had the Franklin this year, but gave it up a few weeks ago. The Johnson-Delafontaine combine has not yet given out the name of the new concern or where it will be located in Chicago.

CUTS RECORD IN HALF

L. L. Whitman in Franklin Travels From Coast to Coast in 15 Days 2 Hours 12 Minutes

New York, Aug. 18—L. L. Whitman has made good his boast that he could cut his own transcontinental record in half. The 30-horsepower six-cylinder air-cooled Franklin runabout which left San Francisco at 6 o'clock on the afternoon of August 2 reached the end of its journey at 12 minutes past 11 o'clock last night. Allowing for 3 hours' difference in time between the Pacific and Atlantic coasts, the run was made in 15 days, 2 hours, 12 minutes. L. L. Whitman and C. S. Carris, who crossed the continent from west to east in August, 1904, in 33 days in a 10-horsepower Franklin, alternated as guides and M. S. Bates, James Daly and C. P. Harris drove in relays, making the jumps ahead by train. There was one of the three drivers and one of the two guides on the car at all times. The car was met at Kingsbridge, the official end of the journey, by two members of the technical committee of the New York Motor Club, Paul L. Snutzel, chairman, and A. B. Tucker, who signed a certificate that a six-cylinder Franklin car bearing the indicated number had arrived at that point at 12 minutes past 11 o'clock. It was said by Whitman that the time of the start at San Francisco had been certified to by the mayor and the president of the Automobile Club of San Francisco. Whitman reported the schedule of the run to have been as follows: August 2, start at San Francisco; 3, Summit, Cal.; 4, Lovelock, Nevada; 5, Wells, Nevada; 6, Ogden, Utah; 7, Rock Springs, Wyoming; 8, Red Desert, Wyoming; 9, Laramie, Wyoming; 10, Kimball, Neb.; 11, Kearney, Neb.; 12, Cedar Rapids, Iowa; 13, Chicago, Ill.; 14, Cleveland, Ohio; 15, Conneaut, Ohio; 16, Buffalo, N. Y.; 17, Poughkeepsie, N. Y.,

and at 11 o'clock New York. A notable feature of the wind up of the run was the fact that the journey was made from Buffalo to New York practically within 24 hours. In addition to many hours lost in Nebraska through encountering heavy mud the car was delayed 36 hours at Conneaut, Ohio, where it ran into a ditch and stone wall in a fog and put its axle out of business and badly twisted the steering gear, to say nothing of ankle and knee injuries to the driver and guide. Whitman starts back to Chicago Tuesday with the same car to study the road preparatory to attacking the New York-Chicago record.

A. L. A. M. SHOW PLANS

New York, Aug. 21—In announcing formally today its show at Madison square garden, Jan. 12 to 19, 1907, the A. L. A. M. show committee says: "To provide for the most attractive, suitable and artistic decorations, the show management sent its official decorator to Paris, London and other places abroad to study details of decoration for embodiment in his general plan. The evidences of this visit will be apparent in the general result, but the main object of the show—the exhibition of automobiles and their parts and accessories—will be of prime consideration and final consequence. On the main floor and elevated platform will be shown gasoline pleasure vehicles. In the exhibition hall, Madison avenue front, will be electric pleasure vehicles. In the basement will be commercial vehicles. On the mezzanine platform, balcony and in the concert hall will be complete exhibits of tires, parts and accessories."

REEVES LANDS RECRUITS

New York, Aug. 21—Alfred Reeves, general manager of the American Motor Car Manufacturers' Association, who returned to New York Saturday from a flying trip of a week to western trade centers, hints that its outcome will result in several concerns added to the association's members and says that everywhere the early show idea met with favor. Mr. Reeves believes, since he had talked with makers and others throughout the country, that the forthcoming winter shows will be the last late exhibitions of automobiles. The makers appear to believe that with early shows they will be able to get to work earlier in turning out cars for delivery. Now that he is back he will take off his coat and with his customary vigor tackle the proposition of a show for the independents—the affair scheduled for early in December at the Grand Central Palace, one of New York's big places.



POPE PEOPLE PREPARE FOR PICNIC RUN

AUTOMOBILE DEVELOPMENT

Four 1907 Air-Cooled Franklins



FRANKLIN'S men of 1907 models exhibit many evidence of enterprise and refinement, as compared with present cars, most of which appear in body lines, motor alterations, running gear changes and various sundry refinements, all of which have already been tested for several months. Franklin cars have, since their first public bow, been associated with originality of design. Full elliptic springs clipped beneath the axles, front and rear; frames a combination of angle steel bolted to a laminated wood sill; auxiliary exhaust valves at the bottom of the stroke in each cylinder for conducting off the hot exhaust, leaving the regular exhaust valves in the cylinder head responsible for slightly over one-eighth of the work, and adopting a governor for the carbureter throttle and another automatic regulation of the spark, being examples of this pioneering spirit. To this list of individual designs can be added an equally appetizing enumeration of features which embody the art and science of motor car building, as exemplified by prominent builders at home and abroad. Besides adhering consistently to a system of air cooling by the use of circular flanges cast integrally with the cylinders, the Franklin concern has worked indefatigably at perfecting this system, which process of evolution has not been accomplished in a single season. The process has not always been a straight course, little reversions and overlappings appearing. One year ago valve cages inserted in the heads as now were without integral radiating flanges; this year they carry vertical flanges arranged radially, and for next season these flanges are dispensed with. In the original cars the carrying of the four-cylinder motors crosswise in front was an argument in favor of simple design, as well as preferred cooling; this year one car carries the motor

in this position, the remaining three having them located longitudinally, as in all water coolers; and 1907 will greet the four models each with a longitudinal motor, the little runabout, familiarly known as model E, with its planetary gearset, now posing as a mature runabout with a longitudinal motor, multiple-disk clutch and sliding gear transmission. With its graduation passes away the last vestige of chain drive by the H. H. Franklin Mfg. Co., Syracuse, N. Y., as does the use of a planetary gearset, both changes in keeping with general tendencies in American and foreign car construction. A notable departure, however, creeps out in the new six-cylinder, in which copper flanges take the place of



FLYWHEEL WITH DISC CLUTCH ENCASED

those ordinarily used. The outside cylinder surface is carefully prepared and the flanges, after positioned, are secured by a special process. In addition to copper possessing better heat radiating properties than cast iron, extra radiation is aimed at by increasing the number of flanges on the cylinders that are nearer the dash, thus the forward cylinder carries integral flanges, that behind it has copper flanges placed closer together, permitting of more being used, and the number of flanges used increase until the back cylinder is reached. Motorists who have followed the various discussions on air cooling will recall the arguments of relative cooling of the four or six cylinders when carried longitudinally. More air contacts with the forward cylinder than with the back one, and this air, besides being of large volume, is cool from the outside, whereas that striking the cylinders further back has its temperature raised. Opponents of this scheme took the ground that much of the air entering through the front of the bonnet fails to contact with the front cylinder and that this air hitting the sides of the bonnet is refracted against the back cylinders, giving them a circulation equal to that of the front cylinder. The latter argument is apparently not accepted by the Franklin designer or borne out by the presence of more flanges on the back cylinders. On the six-cylinder motor the lower flanges and those on the auxiliary exhaust valve casings are formed integrally with the cylinder casting. The experiences of a season have been sufficient to warrant other changes, such as large increase in surface of the emergency brakes, the use of wheels 2 inches greater in diameter on all four models, reduction of as much as 200 pounds' weight in the six-cylinder machine, adopting a four-blade aluminum

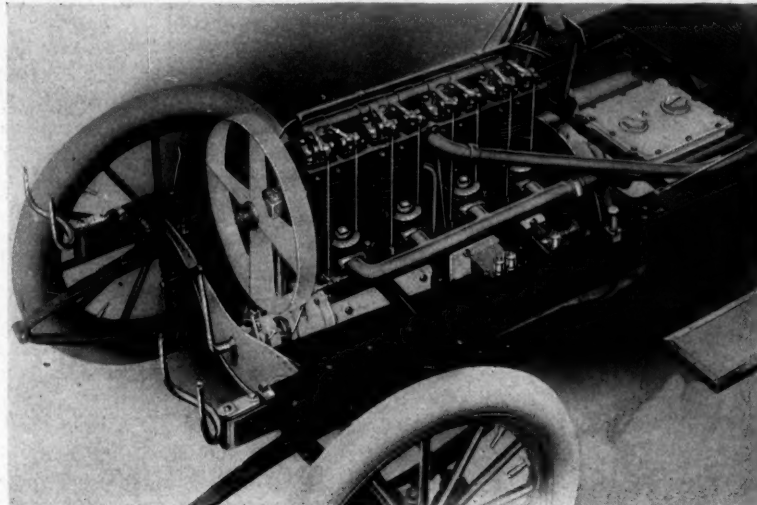


fan for aiding in cooling the motor instead of a sixteen-blade wheel fan previously used, retention of fan-blade spokes in the flywheel for drawing off the air and gases from around the motor, increased use of aluminum in motor and transmission casings, taking the oiler off the dash and carrying it low down on the motor bed and gearing it direct off the rear end of the camshaft, and the mounting of both throttle and spark control levers on top of the steering wheel instead of one on the wheel and the other on the column beneath it, the latter occupying the same position as in present models.

In enumerating the four models E the runabout is dropped, it now becoming G with runabout, while the G touring car remains much as it is this season. Models D and H are still carried, the former being a 20-horsepower machine with 4 by 4-inch cylinders, and the latter a 30-horsepower car with similar sized cylinders. Both models G have 3¼ by 3¼-inch cylinders. The runabout G has, because of its disk clutch, sliding gearset, shaft drive and other improvements, undergone a 28 4/7 increase in price; model G touring car has received a 27/9 per cent increase, and D and H remain at their present figures. Models G now have 30-inch wheels with 3 and 3½-inch tires. D's wheels measure 34 inches with 3 and 3½-inch tires, and H, with 36-inch wheels, has pneumatics, 3½ and 4 inches respectively, on front and rear. In the comparison of weights the six-cylinder H is reduced from 2,400 pounds at present to 2,200, D is increased 100 pounds, being now 1,900, G touring car remains the same, 1,800, and it is expected that G runabout is proportionately lighter. Speed ratings range from 35 miles per hour for the G tourist, 40 for the G runabout, 45 for the D and 50 for the six-cylinder. In all the general design is identical, except in details, the motor connecting with disk clutch to three-speed and reverse sliding gearset and final connection with the differential in the back axle through a square propeller shaft with universal joints. Wheelbases have experienced slight increases. Two inches to the G model makes it 90 inches, 5 inches extra on the D puts it at 105 inches, and the 6 inches added to H makes it 120 inches.

Changes in the six-cylinder engine are shown in the illustration, showing the exhaust side. The long, horizontal pipe hug-

ging the base of the cylinders, is for the auxiliary exhaust taken from a set of exhaust valves located in ports at the cylinders' base. This season this pipe was joined by a separate short pipe from each cylinder, T-shaped unions being required. Now the pipe is made in halves, one for the three forward cylinders and another for the three at the rear, with a nut uniting them. The short pipes to the cylinders are formed integrally with the halves of the main pipe. The long, sloping pipe at the cylinders is for the main exhaust. Hugging the cylinders' heads are two exhaust pipes or yokes, one for the three forward cylinders, the other for the rear three. From the middle of these yokes are branch pipes, that from the forward three sloping gradually towards the base of the dash and joined by the short pipe from the rear three cylinders. In the present cars but one yoke pipe suffices for the six-cylinders and the pipe from it to the muffler connects between the third and fourth cylinders. In defense of its aux-



FRANKLIN MODEL D MOTOR, SHOWING NEW FAN

iliary exhaust system the Franklin people advance such arguments as: A greater charge is drawn into each cylinder, due partially to the free escape of 80 per cent of the gas through the auxiliary opening while the piston is at the bottom of the stroke, which gives rise to a diminution of pressure in the cylinder at the time the intake valve is opened; during the explosion the flame is directed downward and much of it escapes through the bottom opening, but a small percentage returning to the top of the cylinder to heat the main exhaust valve in passing out. Much of the carbon products of the explosion exit into the auxiliary exhaust passages instead of escaping by way of the cylinder head, and so sooting the plugs. These auxiliary passages should be cleaned every 1,000 miles.

Up to the present the main source of noise in these motors has been due to the action of the tops of the pushrods striking on the outer ends of the rocker arms and the inner ends of the rocker arms in turn

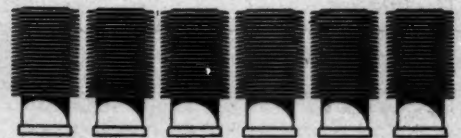
striking on the tops of the valve stems. To obviate this a new style of rocker arm is used. This season the arm is pivoted at its center with the arm resting on the valve stem equal in length to that reposing on the top of the pushrod. Now the new models show the arm resting on the pushrod to be very short, scarcely one-quarter the length of that to the valve stem. The action of the valve has been further altered by changing the hyperbolic-shaped cams on the camshaft in a manner that results in a slower and quieter movement. As a result, many of the striking noises are eliminated. The bottoms of the pushrods bearing on the cams are fitted with mushroom-shaped feet. Inlet and exhaust valves in G are 1¼-inch in diameter, and 1½-inch in D and H. Nickel steel is used in all. The auxiliary exhausts in G have a 1-inch diameter, those in D 1¼-inch and H, 1½-inch. These valves are 98 per cent nickel alloy.

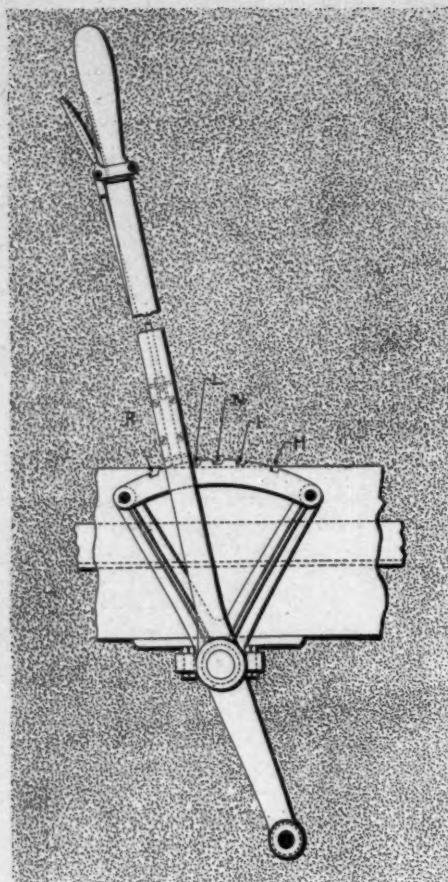
The illustrations of the four and the six-cylinder motors disclose the Franklin

method of underhanging the motors. In the six, three angle pieces, one between the first and second cylinders, one between the third and fourth, and the other between the fifth and sixth, resting at their ends on the angle steel frame, carry the motor through bolts through the upper part of the crankcase. Two of these angle cross pieces suffice in the four-cylinder models. Worthy of passing note is the carrying of the oiler low down on the motor bed at the left beside the back cylinders and gearing it off the camshaft. On top of the oil reservoir are the several

sight feeds, four in case of four-cylinder models and six to model H. In the G models three leads flow to the crank pits and one to the rear main crankshaft bearing, from which all excess oil finds its way to the rear crankpit. In D and H one bearing goes to the fan and another to the rear bearing, from both of which excess drains back into the crankcase. The remainder of the leads connect direct with the crankpits. Carrying the oiler close to the motor instead of on the dash insures an even temperature of the oil irrespective of temperature and guards against oil getting on the clothes of the occupants, besides eliminating that storage shop associated with dashes.

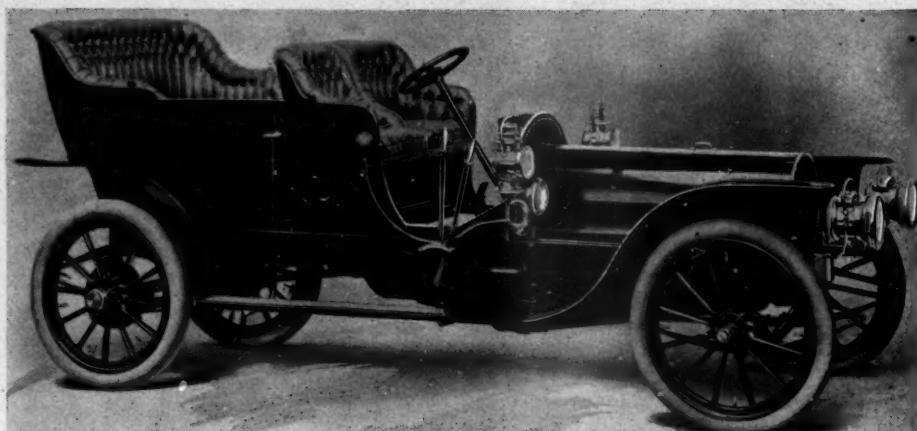
The Franklin carbureter, that has caused so much excitement since the showing





CHANGE SPEED LEVER

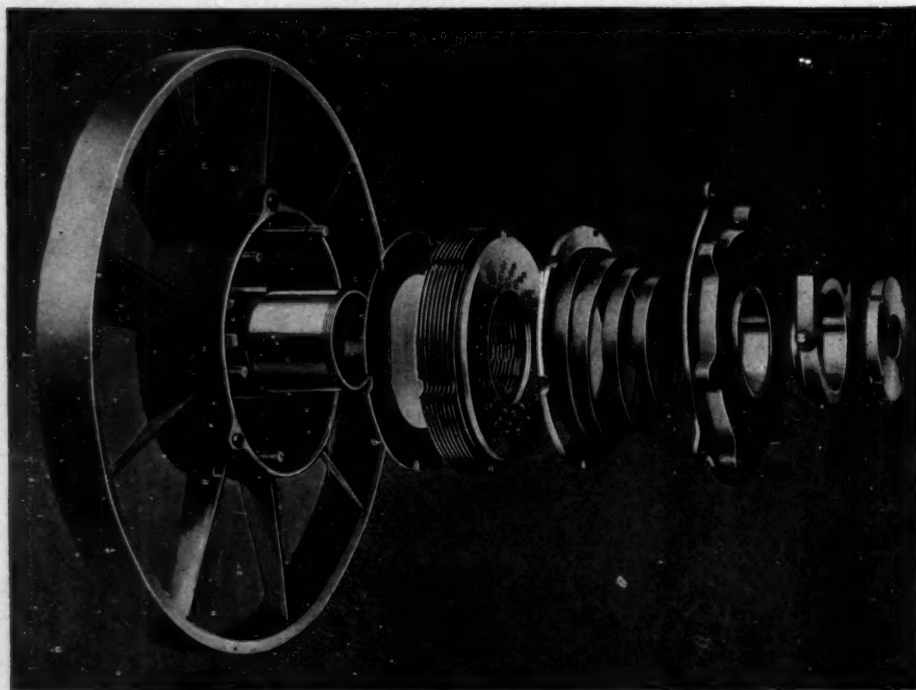
made by it in the recent New York economy test, is shown elsewhere. The right part of the illustration exhibits a side view with the mixing chamber at left and float box to right, while the other illustration gives an end view of the device, the shape of the float chamber and its gasoline connections as they then appear, being given in dotted lines. Compactness



THE FRANKLIN SIX-CYLINDER WITH NEW BODY

has been aimed at in spite of the use of a spraying nozzle concentric with the float stem not being used. The float and mixing chambers are placed close together and formed by one casing. This carbureter is featured by the absence of coil springs controlling valves, the only spring used being one to steady the needle valve. Gasoline in the float chamber A stands at a level indicated by the line CC, and its passage into the nozzle H in the mixing chamber is regulated by a needle valve B, occupying a position in the carbureter between the float and mixing chamber, instead of in the top of the nozzle H, as common in so many makes of vaporizers. Gasoline entering the float chamber from the gasoline tank by way of union S passes a gauze strainer in the angle of the pipe, and is subject to the action of a ball valve attached to the lower end of the metallic float stem. A spring W supports the strainer, maintaining it at a fixed position in the angle of the piping and by removing the bottom screw cap D, spring and strainer drop out. Changes in

the needle valve B are made from the dash of the car through a universal coupling connected with the part J of the valve stem. A rod passes from the coupling to the dash and there carries a finger wheel. After passing the valve B the liquid fuel finds itself in a horizontal passage K crossing the mixing chamber directly beneath the nozzle H, with which it connects by vertical pipe. A thumbscrew in the end of the passage K permits of cleaning the passage. The level of gasoline in the float chamber is slightly below the top of the nozzle. So much for the gasoline system; and examining the air scheme, it must be noted that all entering air coming by way of pipe G raises a suction valve F at the base of the mixing chamber. Once passed this valve the air enters a conical passage X, best shown in the left part of the drawing, the shape of the passage being to direct the air to a focus at the top of nozzle H, thus drawing sufficient gasoline. The mixture later passing to the motor is subject to the position of the butterfly throttle L. To insure a mixture with gasoline and air and a good percentage at various motor speeds a bypass passage Z has been introduced. This passage at its bottom communicates directly with the outer air below the suction valve F, and has within it a bypass valve M, which is interconnected with the main throttle L, through the links N and P. The former link connects with the ball governor of the engine. With the throttle valve nearly shut, so that the motor will just run, the bypass valve is entirely shut, necessitating all entering air passing the spraying nozzle H. As the throttle L opens, the bypass valve opens slightly, allowing extra air entering the mixture without its passing the spraying nozzle, and the more the throttle valve is opened the more is the bypass valve opened and the more air admitted to the mixture without its passing the spraying nozzle. By this means the mixture is diluted at high motor speeds, and a proper mixture maintained. In models G and D a newly-devised three-spray nozzle takes the place of H and a six-spray one serves in model H. A new style of connectionless intake pipe is used on all four models, it being

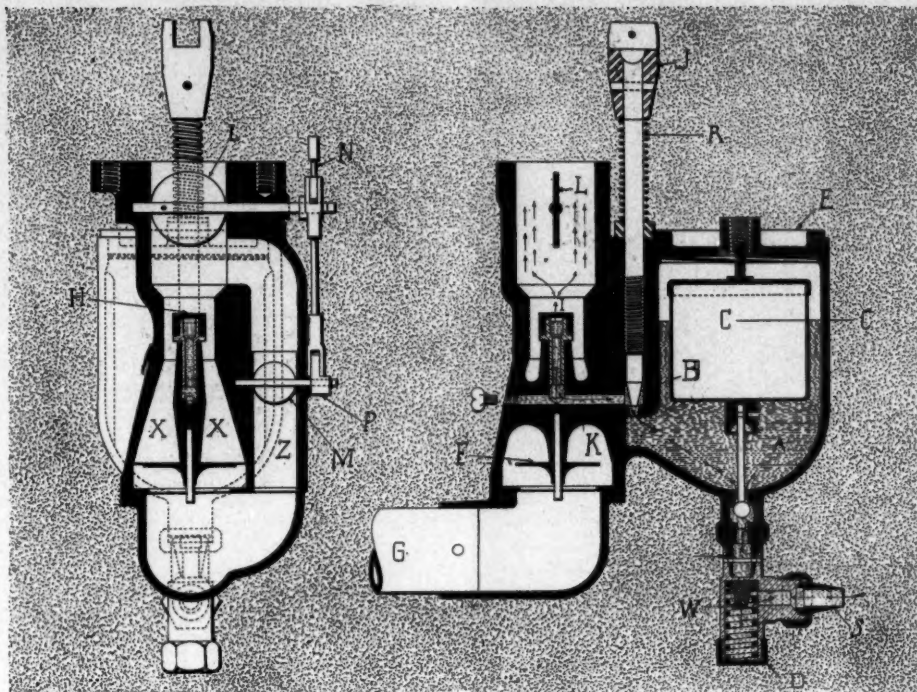


DISSEMBLED VIEW OF FRANKLIN DISK CLUTCH

designed to make it impossible for air to enter the pipe between the carburetor and the valve ports. Besides the ball governor controlling the mixture flow to the cylinders, a hand control is mounted on the steering wheel. The general piping design on the six and four-cylinders is much the same as in 1906 motors. A large-diameter, intake pipe is carried close to the cylinders, eliminating the necessity of branches to each. A single pipe from the carburetor unites with this.

Points about the motor construction that merit attention are the use of specially-treated nickel steel in the crankshaft, it possessing an elastic limit of 110,000 pounds, and the turning, grinding and lapping of the bearing surfaces with a limit in diameter and variance between the shoulders of .005 inch; cylinders and pistons are made accurate to .001 inch; makers of the many motor parts are provided with special automatic measuring gauges for accurate measurement. The method of having a crankshaft bearing between adjacent cylinders is continued, and the using of four bearings for the camshaft is in the hope of preventing bad timing by springing of the shaft. Accessibility of the motor shows itself in the large inspection plates in the side of the crankcase and the ease with which the base of the case can be dropped out of position, thus laying bare the crankshaft.

Jump spark ignition, heretofore in general use on Franklin machines, remains, as does the placing of the spark plugs horizontally in the right side of the cylinders, directly beneath the intake valves. Instead of carrying the wires—fence-form—on wood supports above the cylinders, in model H, they are contained in a large-diameter tube lying along the cylinder heads, as in models G and D at present. A new and novel device which operates between the timer and crankshaft, and automatically governs the spark, prevents the possibility of accidents due to back-firing when attempting to start the engine on an advance spark. Control of the spark in models D and H is on the wheel beside the throttle, and on the G models on the pillar beneath the steering wheel. The timer is carried on the forward end of

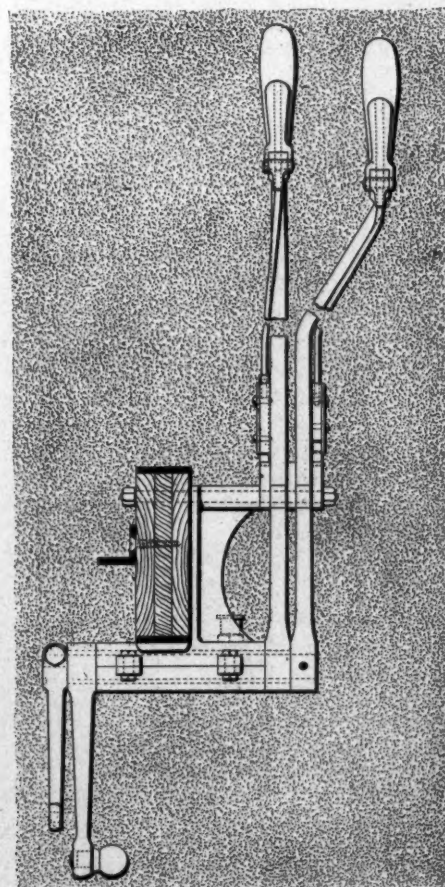


FRANKLIN CARBURETOR, SHOWING AIR BYPASS CHANNEL

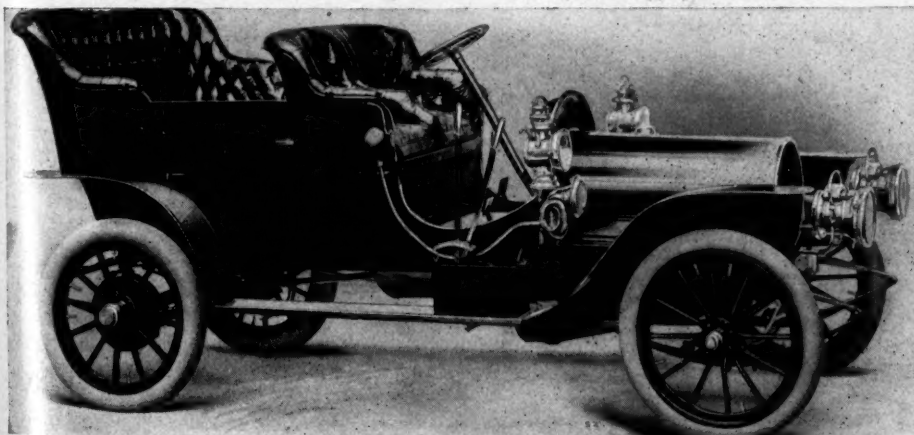
the camshaft, thus obviating the necessity of extra gearing or shafts in operating it. The throttle governor, of accepted centrifugal type, is carried on this shaft and encased in an aluminum housing. All cars operate with a cold compression of 62 pounds to the square inch, but the speed limits of the several motors varies slightly; thus, G ranges from 200 to 1,800 revolutions per minute, and D and H, with 4-inch strokes, 200 to 1,500 revolutions per minute. With G motor running at 1,800 there is a piston speed of 1,100 feet per minute, and with the D and H motors at their limit 1,500 the piston speed reaches 1,000 feet per minute.

Few changes are made in the multiple-disk clutch. In the dissembled view, at the left is the flywheel with drum-like center, in which is contained all of the disks—an oil bath surrounding the disks. On another page is shown how compact, oil-tight and dust-proof is the clutch when entirely encased. Of the two sets of disks, one series made of bronze is carried on the flywheel, secured thereto by a set of

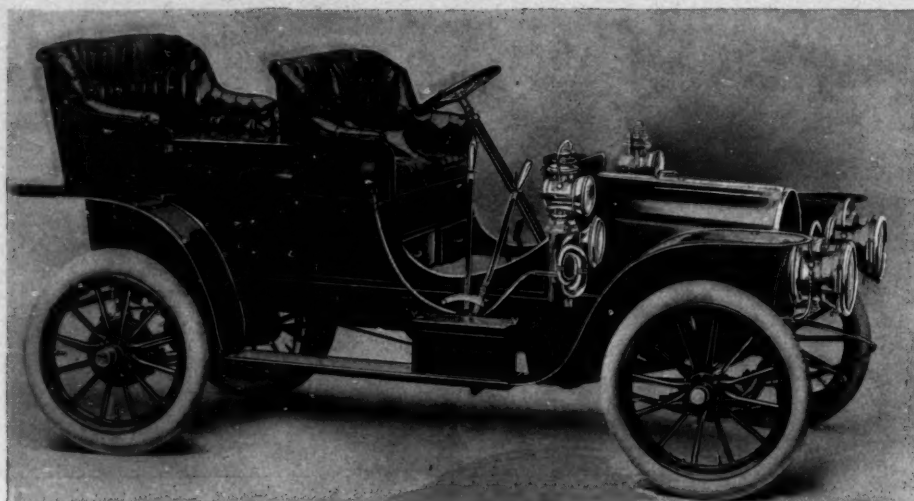
six bolts, four of which are shown. Alternated with these disks is a set of steel ones carried on what is termed the clutch driver, which connects through universal joint with the shaft of the transmission set. To the right of these disks is the ball-bearing end thrust and, further to the right, the reader sees the flat spiral spring, so made that the pressure of the spring is



FRANKLIN SIDE LEVERS



FRANKLIN MODEL D IN 1907 ATTIRE



FRANKLIN MODEL G TOURIST CAR

exerted upon the disks near their peripheries instead of at their centers, as would be the case if a small-diameter coil spring were used. As the clutch is engaged all oil that has been between the series of plates is gradually expelled, allowing of an easy clutching without gripping, and with the oil removed from between the plates there is no slipping. The ball thrust collar comes into play only when the clutch is thrown out, when it takes the thrust exerted by pressure on the clutch pedal.

Franklin sliding gear transmission, operating on the straight sliding gear principle, is carried in an aluminum case beneath the toeboard of the car, a position selected because of the accessibility afforded by it. Both main and countershaft within the case are in the same horizontal plane, the former a squared shaft at the left side, carrying a pair of sliding gears. Shafts and gears are made of special $3\frac{1}{2}$ per cent nickel steel forgings, all parts being hardened and ground to accuracy. Chrome steel is furnished in the bearing surfaces. The case is of the box type, with holes in the ends for taking bearing plates, carrying the shaft and the entire top an inspection plate.

The change gear quadrant is so arranged that the operation of changing from

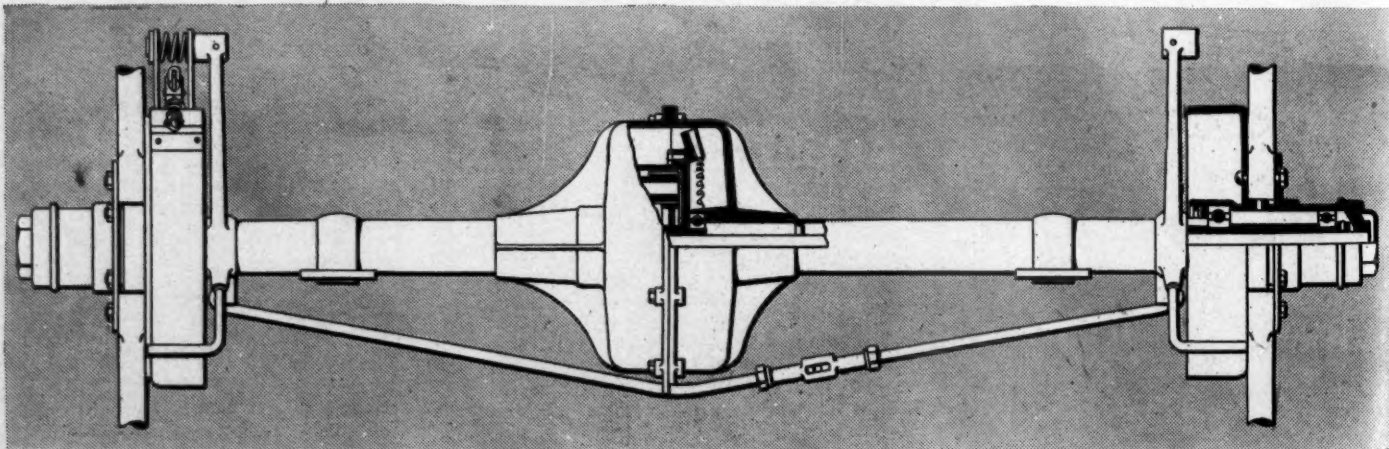
one speed to another is largely accomplished automatically. This is explained by the illustration, in which the four notches in the quadrant R, L, N, I and H represent respectively reverse, low, neutral, intermediate and high. The neutral notch has curved ends, so the locking bolt connecting with the latch lever can slip out of the notch without the hand touching the latch lever. For instance, when in neutral position and a change to low or intermediate is desired, it is only necessary to pull or push the lever until a stopping point is reached. To get from intermediate to high the latch lever must be used, owing to both ends of the intermediate notch being straight instead of curved. To get from high back to intermediate, however, pulling back is sufficient. The movement needed in making other changes can be followed by examining the ends of the quadrant notches. The latch lever is placed on the back of the main lever to prevent the possibility of it accidentally being operated. In another illustration is shown a view of the change speed and emergency brake levers, the latter being considerably offset, throwing it well out of reach of the change speed one. The method of securing the bracket for supporting these two levers to the laminated wood frame appears, as does

the oil cup for lubricating both of them.

In driving from the gearset to the back axle the shaft serves in all models, the G runabout being the last to come to this method of drive. Shafts employed are of square section, carrying universal joints of new design that are claimed to be good conservers of energy and to compensate for any side motion or position variance. The rear axles on D and H are of the floating type, fitted throughout with ball-bearings and so designed that the axle casing carries the load and the wheels. Brakes on the back hubs for emergency use are double-acting and lever-applied, and that for regular usage is a contracting band acting on a drum on the shaft immediately behind the gearbox and is pedal-applied. Front axles are tubular, with a pronounced downward curve from steering pivot to steering pivot, the latter of the Elliott type, with ball-bearings, taking the weight in models D and H. Front wheels are carried on roller-bearings. Franklin frames are laminated wood sills, three thicknesses of wood, suitably secured together and rigidly attached to the angle steel pieces, supporting the motor and gearset.

Aside from the use of four full-elliptic springs in all of its models, and the use of laminated wood frame sills, the maker has further aimed to reduce vibration to the minimum by giving the springs a slight rise at the forward end, so that when striking an elevation on the road, such as stone or dirt lump, the spring angle is such as to absorb all up-and-down jar and also to take up that jar occasioned in a backward direction, thus taking this strain off the motor and its transmitting parts. Springs in the G models are 36 inches long and those in D and H, 40 inches.

Improvements in all four body designs have been along the line of affording more seating and foot room to the passengers and greater baggage and tool-carrying facilities. To attain this, underneath the front seat and tipping back into the tonneau is a tool box so arranged that when not held in an open position it tips, of its own weight, back into its closed position. In this extra tubes and oil can be stored and tool drawers are placed forward un-

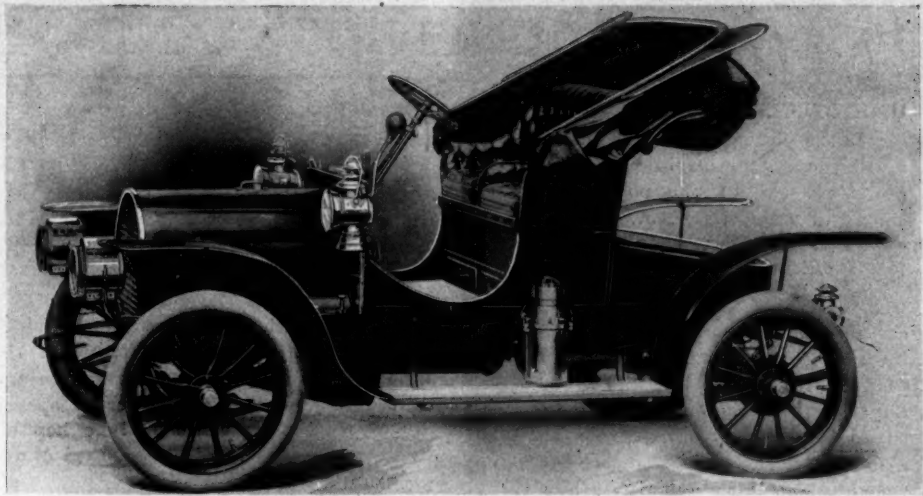


NEW BALL-BEARING BACK AXLE USED IN FRANKLIN CARS MODELS D AND H

der the front seat for regular repair equipment. Beneath the tonneau seat is a compartment for robes and other articles, and added to these are handles and robe rails for the convenience of the passengers. The enclosed style of mudguard, as used this season, is retained with a slight improvement, resulting in a shortening of the running board. Models D and H have round-topped wood dashes, the G models sticking to the rectangular style. Standard color is royal blue with black upholstery throughout.

WEBSTER GASOLINE GAUGE

Of the three illustrations of the Webster gasoline tank gauge, one shows the top of the gauge or dial part for a gasoline tank 9 inches deep; another is a view of the gauge within the tank, showing the hollow brass float and the gasoline level indicated by a dotted line; the third is a sectional illustration telling minutely how the several parts of the gauge are put together. The gauge, suitable for tanks of any depth, consists of a hollow brass ball float carried on the end of a long arm on the inner end of which is a bevel ball gear, that meshes with a similar gear on the bottom of a vertical shaft on the top of which is carried the pointer. The float resting on the top of the gasoline falls and rises as gasoline is used or put into the tank. The rising and falling motion turns the pointer thus registering in inches the depth of liquid in the tank. Although the illustration shows the gauge for a 9-inch tank others can be had for tanks of varying depth. The length of the arm carrying the float can be varied to suit the nature of the tank. To prevent corrosion all parts are made of brass and steel and the dial is silvered, with plain black figures showing the depth. In the sectional illustration A shows the brass barrel that is fitted into the top of the tank; the brass shaft B operates the pointer and carries a non-corrosive gear C on its lower end meshing with a brass cup gear F on the end of the float arm. D is a stop on the opposite side of the cup gear to which the float arm E is secured; N is the glass cover for the dial case, M the steel pointer, P the silver dial, Q the pointer screw, L a brass cap



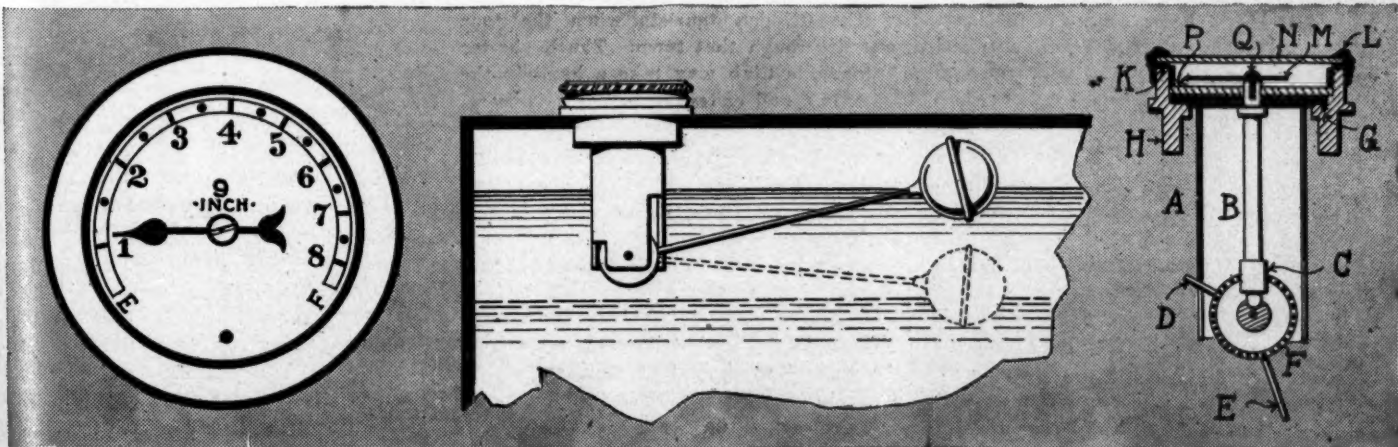
FRANKLIN G RUNABOUT NOW FULL GROWN

holding the glass cover in position, K a rubber gasket to prevent leakage, H a brass collar and G a set pin preventing the barrel A from turning in the tank head. The dial on the tank top is $1\frac{1}{2}$ inches in diameter and not being of any perceptible height can be readily fitted into any tank whether located under the seat or beneath the car floor. The Webster Mfg. Co., Detroit, is the manufacturer.

THE LAW OF AUTOMOBILES

One of the most valuable books relative to automobiling that has appeared this season and one of the first really valuable productions on automobile law has recently come from the press of Matthew Bender & Co., Albany, N. Y. Its author, Xenophon P. Huddy, L.L. B., a member of the New York bar, has divided his 360 pages entitled the Law of the Automobile, into two divisions, part one, 115 pages, dealing with the various aspects on automobile legislation and part two a complete compilation of the automobile law of the different states of the Union, as well as the law of England. In part one are fourteen chapters, covering legal motoring under the following heads: Definition of automobile, historical, nature and status of automobile, rights of automobiles to use of highways and streets, registration and licensing, operation on highways, proof of automobile

speed, the garage and garage keeper, hire of automobiles, the chauffeur, the manufacturer of motor cars, safety of roads for automobiles, automobile legislation, and federal control over motoring. Each of these chapters is not pages of uninteresting law copied from the statute books, but a digest of the statutes in which the nature of important cases is cited. At the bottom of each page is a key list telling the statute where full details of any case referred to can be found. These chapters narrate what the law says as to relations between an owner and his chauffeur, what rights the car has on any highway or street, what municipalities have to do as to road improvement, what control the garageman has over a car in his possession, what the renter of an automobile is subject to by way of damage, and what are the proofs of speed generally accepted by judges of the supreme court. In the second part the state laws of thirty-six states, while not given in full, are so covered that all detail necessary to the ordinary motorist is covered. In addition is the motor law of England. Every user of a motor car should possess a copy of a book of this nature and the present author has set a high-water mark in preparing a book that can be intelligently read by the layman and yet one in which all the vital points of the law are completely dealt with.



TOP VIEW, TANK SECTION AND CONSTRUCTIONAL VIEW OF WEBSTER GASOLINE TANK GAUGE



LEGAL LIGHTS AND SIDE LIGHTS



UNIQUE CLAIM MADE

"Is the pleasure to be derived from operating one's automobile worth \$20 per day?" is one of the points which the courts of Camden, N. J., will be called upon to settle shortly. It appears that Hiram G. Hallinger, a Camden builder, was taking his daily airing in his touring car when a bold, bad motorman, employed by the Public Service Corporation, propelled a trolley car into the rear of Hallinger's machine. The repair bill amounted to \$200, and Hallinger has sued not alone for that amount but for \$340 additional, which is to recompense him for 14 days' pleasure of which he was deprived, at \$20 per. Hallinger bases his claim on the fact that when a man sues a corporation for injuries inflicted upon his wife he invariably includes an item for the loss of her services. Why not, then, ask for damages for the loss of the services of one's automobile? Besides, Hallinger says that while his car was in the hospital he was compelled to patronize defendant's trolley cars, which was adding insult to injury, and sometimes he had even to walk, which was ignominy in itself." Seriously, Hallinger says that his automobile, which he uses constantly either for business or pleasure, saves him \$20 worth of time daily, and that the claim is not extortionate.

MASSACHUSETTS LAWS

In a circular addressed to the superintendent of police of Boston by Police Commissioner O'Meara, there is considerable evidence of the good sense of the commissioner in his directions for the enforcement of the automobile laws lately passed in the state of Massachusetts. He says, in the first place, there will be no general movement to arrest offenders regardless of their intent or the character of the offense. The reckless or the drunken driver will be punished to the extent of the law. In other cases the police are directed to watch, warn and inform owners, dealers and drivers with the idea of entering a little later upon a firm, sensible, thorough enforcement of all the provisions of the laws. In the first place, the police are directed to make sure of the identity of the machine and the driver, and for this purpose will undertake at once to enforce the ordinance regarding the display of numbers and numbered lamps. When a car improperly equipped passes an officer, it may be stopped by signal by another officer stationed at a different point. Refusal to stop is a violation of the law and arrest and punishment of the offender will follow. The machine having been stopped because of defective lamps, or numbers, or for another reason, the policeman will point out the deficiencies and request that they be remedied. Police will not stop

machines merely for the purpose of inspecting licenses and certificates, but when a car has been stopped for any other reason the officer will ask to see the certificate of registration of the machine and the license of the operator. If the license and certificate are incorrect, the officer will give warning that the equipment does not comply with the law and, excepting in cases involving danger or intentional violation of the law, the machine will be permitted to proceed. A register of operators of machines warned will be kept at headquarters and a subsequent neglect will mean that the violation of the law is deliberate and will be so treated.

If a car is found to be without a certificate or an operator without a license, both of which are required, the officer will usually in the first instance allow the machine to proceed and report to his captain, by whom further action will be taken. But if it should appear to him that the condition of the car or the character of the operator might lead to danger upon the road, arrest will follow. The law permits machines registered in another state to run in Massachusetts for only a certain number of days without a Massachusetts registration. The police will take particular notice of such machines, making reports sufficient to identify them, and if any are found for a second time after a period of 7 days without the Massachusetts registration prosecution will ensue.

The law requires dealers to keep certain books as to the outgoing and incoming of their cars and the captains of the police are ordered to inspect such books, and any neglect after first warning will mean a prosecution. The attention of the police is drawn to the fact that there are laws governing the use of public highways by other vehicles as well as automobiles and motor cycles.

GLIDDENITES WILL FIGHT

John J. McInerney and George D. Wilcox, attorneys located at Rochester, N. Y., have accepted briefs to get after the officials at Lima, N. Y., who arrested several of the Glidden tourists when the tour passed through that town. The Rochester Automobile Club may take a hand in the fight, too, and endeavor to make it warm for the constables. The lawyers have succeeded in stirring up considerable feeling against the Lima motorphobes and the Democrat and Chronicle of Rochester recently came out with a strong editorial, taking sides with the unfortunate automobilists, which in part said:

"The other side of the story has not yet been made public; but it would seem from the general agreement of members of the party, including members of the New York, Buffalo and Rochester automobile clubs, that the tourists have a pretty strong case

against the Lima officials. The usual offenders in these controversies are reckless and irresponsible drivers of automobiles; but in the Lima affair, according to the account of the tourists, every reasonable effort was made to comply with the village ordinance. The apparent usurpation of judicial authority by a constable or police official to the extent of exacting an exorbitant fine on the highway is also a matter to be explained in court. The public and local officials should understand that there are rights as well as obligations on both sides of this matter. The rights of automobilists are just as clearly and vigorously defined in the laws of this state as those of city or village corporations. * * *

A judicious and competent official in city or country will familiarize himself with the law, and will not permit his personal antagonism or prejudice to govern his action. Many motorists are not arrested who richly deserve to be held up and fined; others who are clearly within their rights under the law become the victims of the cupidity or the stupidity of local officials."

NEW POINT RAISED

A judge of the district court at Lynn, Mass., has ruled that the operator of an automobile, stopped by the police for illegal act, and who assists the police even by so much as giving his name and address, secures thereby, under the new law, immunity from prosecution. Police Commissioner O'Meara says with determination that if the Boston courts agree with the Lynn judge, that he will instruct the police to arrest violators without making inquiries and to retain the persons until they are bailed or tried.

NIAGARA FALLS ORDINANCE

An ordinance regulating the speed of automobiles and other conveyances was recently submitted to the common council of Niagara Falls, N. Y., by the aldermanic committee on ordinances. The ordinance provides that on two or three streets in the central part of the city the speed shall not exceed 6 miles an hour. In other sections the limit is 10 miles. The ordinance also lays stress on the necessity of bells and other means of warning on automobiles and other conveyances. No action has been taken by the council, but it probably will come up later.

WANTS DRIP PANS

Deputy Street Commissioner Kennedy, of Buffalo, has officially reported that the asphalt pavement is being damaged by oil or gasoline drippings from automobiles. He has suggested that an ordinance be passed requiring the automobiles to carry drip pans. The matter was brought to the attention of Mr. Kennedy in a communication from President Dewitt Clinton, of the Society for the Prevention of

Cruelty to Animals. Mr. Kennedy does not believe that it would be feasible to put sand on the oil spots, as at this time of the year it would cause a dust nuisance. He recommends the drip pan ordinance, and closes with a warning that the pavement will be ruined if the depositing of oil and gasoline is not prevented.

ASK WHERE FINES GO

In the belief that Jersey justices are taking advantage of the Frelinghuysen law to impose unjust fines and that many of the fines now being collected from automobilists by the superserviceable justices and constables upon whom devolves the duty of enforcing the law, fail to find their way to the state treasury, the New Jersey Automobile and Motor Club is preparing a test case to bring the matter to an issue. A formal charge will be made against Justice Wilie, of Woodbridge, that he has unjustly imposed fines upon an automobilist, one Andrew W. Petit, the club having taken up Mr. Petit's cause and engaged counsel. Mr. Petit is prepared to prove that he was driving at a speed well within the maximum allowed by the new law. His protests against the justice's action were ignored by that official. The charges that fines collected by many

justices have not been turned in, in all cases, are strengthened by the recent action of Motor Vehicle Commissioner J. B. R. Smith, who issued a notice that such a course constitutes malfeasance in office and would subject any justice found guilty of the offense to severe penalties. This is expected to have some effect.

AFTER ILLINOIS LAW

With a new board of directors elected, the Illinois State Automobile Association intends to make its chief work the coming year the securing of a law that will be favorable to automobilism in the state. A more liberal speed limit is one of the chief considerations, it being the belief of the officers of the association that 20 miles an hour should be permitted in the country and about 15 in the cities and towns. The association believes in the suppression of scorching and intends to aid the authorities all it can in apprehending the law-breakers, but at the same time the directors are going to offer the suggestion that the cause of good roads could be helped a lot by taking the fines imposed on the scorchers and applying them to the maintenance of the highways in the state. Another plan they have in mind is to get the state to recognize the tags of cars from

other states. Those who attended the last automobile show held in Chicago experienced a lot of trouble because of what might be called the bull-headedness of the city officials who persisted in arresting the out-of-town demonstrators who failed to take out a Chicago license. This raised such an uproar at the time that there was serious talk of cutting Chicago out as a show town in the future. However, Sam Miles and a few others interviewed the chief of police and as a result the dogs of war were called off and for the rest of the time the demonstrators were not molested. It is to avoid these little mixups that the state association will endeavor to have it put down in black and white that other tags shall be recognized. It is believed that the time is now ripe for the passage of a bill with all these measures incorporated in it. The motorists from down the state who own allegiance to the association say that the legislators in their sections are beginning to sit up and take notice of the motorists and that it will take little persuasion on their part to win them over to the side of the automobilists. At any rate, they are going to help President Gorham all they can to win over the legislature on the bill proposition.



THE READERS' CLEARING HOUSE



WANTS SMALL CAR

St. Anthony, Idaho—Editor Motor Age—There is going to be a market here for a low-priced single-seated motor car. As I am in the repair business already I concluded I might also obtain the agency for some car of reliable make that would fulfill our requirements, which seem to be unusually severe. In looking through your publication I have selected one that seems to me will answer, as near as I am able to judge from the illustration. This is the Jewell, of the Forest City Motor Car Co. It is impossible for me to examine one of these little cars in a near locality, nor have I ever seen a discussion regarding it in any publication. Therefore I take the liberty of asking for an opinion as to the general make-up and also workmanship and finish. The conditions prevailing here are severe, and in order that you may form an opinion I will try to detail them. The soil is of a sandy gravel composition and when moist makes a very hard road. As it is the practice to irrigate the farms by ditches and canals, some of which are necessarily above the road level, it often happens that the sub-water raises to the depth of 10 to 18 inches in the roadway and forms a pond from 10 to 50 feet long; then, again, loose sand will be encountered for probably a mile. Therefore I consider that a light car with an engine a little larger than the average, as compared with car weight, and a road clearance of 15 to 18 inches, will be the

proper thing for this locality. I will greatly appreciate any information you can give me.—A. M. H.

Motor Age cannot undertake to differentiate between different cars, but can say that in cases known the purchasers are satisfied with the small car named. It should be remembered that these purchasers bought knowing they were not to expect all that a higher priced car would give them.

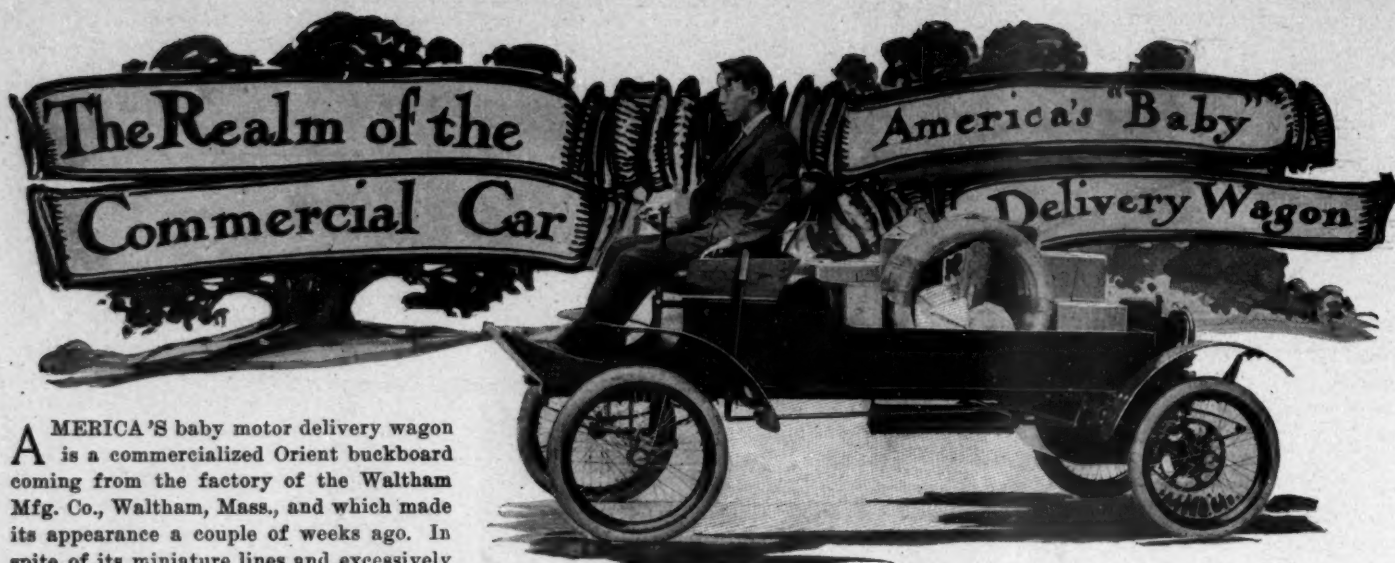
THREE-CYLINDER TWO-CYCLE

La Salle, Ill.—Editor Motor Age—It has occurred to the writer to wonder why no manufacturer, so far as I can discover, has tried the three-cylinder two-cycle motor, with cranks set at 120 degrees, for automobile use. Would not this be similar in result to the six-cylinder four-cycle motor? A three-cylinder air-cooled motor of the two-cycle type, if practical, would seem an ideal arrangement. What are the disadvantages?—V. A. M.

The Elmore Mfg. Co., of Clyde, O., the pioneer user of the two-cycle motor for automobile use, makes a car fitted with a motor of this design. There are no particular disadvantages, but by adding another cylinder the power can be materially increased at small expense. Write the Elmore people for its claims on the two-cycle motor. The Olds Motor Works also makes a two-cycle motor, but with four cylinders. The two-cycle motor is growing in favor, and some of the best known makers are watching developments eagerly.

TRAP SIGNS WANTED

Waltham, Mass.—Editor Motor Age—In view of the police traps which are continually set in the small towns for the unwary motorists, I think it would be an excellent idea for the automobile journals to join in advocating a signal whereby we can warn other motorists without reducing the speed of their car. In this country we are all very generous toward each other in giving warning concerning police traps which come to our knowledge, or about which we have the good or bad fortune to post ourselves as the case may be. To do this, however, requires slowing down your own car and stopping the other, or else the information is incomplete and the others have only a vague impression of what is meant. Now I think if we would all agree on the Dr. Munyan sign of the right hand elevated with the first finger pointing upward, it would be instantly understood as a warning of a police trap ahead, and if speed permits, the name of the town where the trap is can be shouted from one car to another. If this sign can be generally adopted, it would certainly be of great benefit to us all, and I don't know of anybody that can get it into circulation better than you. At the same time, it might be a good idea to advocate the elevation of the open left hand as a warning of a dangerous curve or bad place in the road ahead, which is frequently well worth imparting to motorists who are going at a high speed.—E. P. Chalfant.



AMERICA'S baby motor delivery wagon is a commercialized Orient buckboard coming from the factory of the Waltham Mfg. Co., Waltham, Mass., and which made its appearance a couple of weeks ago. In spite of its miniature lines and excessively low price it handles its 350 pounds with apparent ease at speeds ranging from 12 to 15 miles per hour. Readers of Motor Age familiar with the present friction-driven Orient buckboard will recall how its 4-horsepower, air-cooled, single-cylinder motor is carried over the back axle, with the crankshaft extended slightly to the front, where it carries a large friction disk. On the face of this disk bears the periphery of a friction wheel carried on a cross jackshaft immediately in front of the disk. On the ends of the jackshaft are the sprockets for the side chain-drive. By sliding the friction wheel on the jackshaft so as to make it contact with the friction disk at different points speed changes are made and by moving the wheel past the center of the disk a reverse movement is given. The main difference between the buckboard system and that in this little delivery wagon is that in the latter the rear sprockets on the back wheels are made extra large, reducing the speed from 30 miles per hour to the figure mentioned above. The carrying space is of ample length, extending from the seat to the motor, a distance which can be computed by comparing it with that of the wheel-base, measuring 89 inches. For use in wet weather a large mackintosh is furnished which covers the load and also affords protection to the driver.

For light delivery work the maker estimates the little car, owing to its speed qualities, should do the work of three delivery wagons. For such a business as that of a haberdasher where the loads are light and fairly capacious, the wagon seems admirably adapted. Hatters, shoe houses, florists, milliners, novelty houses, art supply houses and numerous others also can use it. Besides the simplicity of operation—tiller steering, and lever and pedal control—the light weight of this wagon is promising as it means considerable reduction in the cost of tires. Gasoline supply is carried in a cylindrical tank placed immediately behind the seat. A convenience not often found in commercial machines and yet possible with this baby

Orient is that of placing an additional passenger seat in the carrying part, thus converting it into a four-passenger touring machine without the unpleasantness of body lines savoring of commercial features. Should commercial users desire a covered delivery machine it would not be difficult to fit the body with a permanent canopy top.

The field for a light delivery wagon has been ably exploited the last couple of seasons by the fleets of tricars or three-wheeled motor cycles that have become common sights in large cities of late. The three-wheeler carries a small load compared with that of the Orient baby, but none the less the latter's capacity makes it eligible for "rush" delivery work and ordinary light service. Many large firms require special wagons for this rush work.

MIAMISBURG'S PROGRESS

Miamisburg, O., has entered the field of commercial car operation, one of its enterprising citizens, Frank Gebhart, being

the pioneer to pilot the first commercial car in the place. Mr. Gebhart, actively engaged in the express and baggage business for a great many years, was confronted with the problem of adding more horses to his force or introducing a motor wagon. After due consideration, the lines, machinery and performance of the water-cooled Logan caught his eye, and an order was soon followed by the interesting sight of this stalwart wagon operating on the streets of the city, greatly to the amusement of the people but much to the distraction of several of the unfriendly equines. The first few days did much to break the ice, and now the horse good-naturedly accepts the inevitable. Mr. Gebhart, being somewhat of a free lance in the place, has wandered wide of the strict mark of express and baggage service and, as shown in a couple of accompanying illustrations, uses the machine for such services as furniture moving and tobacco hauling. The tobacco load consists of twenty large cases, the exact weight of



LOGAN CAR IN MIAMISBURG TOBACCO INDUSTRY SERVICE

which cannot be given. In the other illustration the group of furniture-moving workmen surround the front of the truck, which is loaded high with the various necessities of household existence, all of which are piled on in true moving fashion. For such work the height of the load is the only limit placed on the machine, as it has shown its ability to transport anything asked of it.

Besides work of this nature the ingenious owner has converted it into a passenger vehicle by the addition of cross seats on the load platform. Already in this new guise it has done excellent work at local picnics, carrying hundreds of passengers to points where trolley and steam cars are unknown and where the horse requires too long to reach. The seats in such cases provide accommodation for twenty, and standing room is provided for fifteen more, making a total of thirty-five people and the driver, a load close to $2\frac{1}{2}$ tons. The car also goes to the ball grounds and on evening excursions. Features of the wagon are: 30-horsepower, two-cylinder, $5\frac{1}{2}$ by 6-inch motor; sliding gear transmission; chain drive; 15 gallons gasoline capacity; 15 gallons water capacity; speed, 10 miles per hour, and 2 tons' capacity. The truck so far has averaged 50 to 60 miles per day at a cost of less than \$1 for fuel and oil, and is in charge of an expert mechanic who is responsible for keeping it in condition and making all repairs and replacements. At its present rate of work the truck is doing away with three horses and two men, besides having a fuel bill much less than the fodder allowance for three horses. The amount of care bestowed on it each night does not equal that required by a team of horses.

CONQUERS THE DESERT

Gila Bend is a town in Arizona, close to the Mexican border, which is given up almost wholly to mining and mining interests. Down there, after leaving the railroad, the people have always depended on bronchos, burros and mules for transportation, and even those sturdy animals, after a short and burdensome life, have succumbed to the torrid heat and burning sands of the region. The problem seemed a hopeless one until recently, when a representative of one of the leading copper mining companies at Gila Bend bought a two-cylinder Jackson car at the garage of

the A. W. Gump Automobile Co., Los Angeles, and drove it over and into the desert, and put it in commission between Gila Bend and the mine, 60 miles away. It was a trip which had never been attempted in an automobile, it is said, except once by a steamer, which stuck 25 miles out in the desert and had to be towed back.

From all accounts the route is such as would pale the face of the doughtiest Glidden tourist. It is 60 miles over desert sand, through about twenty-five aroyas of volcanic rock, 2 miles through a crater,



MIAMISBURG WAGON AS A FURNITURE MOVER

and no roads at all—just simply trails. Mr. Robbins, who recently accompanied the car from the coast, made this trip with a Jackson Model C four times in succession, with the temperature 127 degrees, which is understood to be about normal at this season of the year, and without the slightest trouble of any kind. The purchasers were highly elated over the endurance of the car, and it is probable the innovation will lead to the speedy adoption of this means of transportation in the extreme southwest, where all other means of travel seem impracticable.

PORTLAND'S OFFICIAL TEST

A combination of methods of motive power in city transfer business has resulted from a year's competition between electric

trucks and horse-drawn wagons in Portland, Ore. Comparative economy of operation between the two methods will be determined after a year's experience by the consolidated concerns. It is said the question would be easily settled in favor of the electric trucks were it possible to eliminate the cost of constant renewal of their rubber tires.

The Oregon Auto-Despatch Co. started in the transfer business about 1 year ago, using electric trucks exclusively, and the operation of these trucks, with their electric hoists for handling safes and heavy machinery, was watched with lively interest by commercial people as well as by competitors who were using horses. It was soon proven that self-propelled trucks can be operated with success and economy on hard-surfaced streets. But as the company was offered much business in the suburbs of the city, where the streets are rough and at times muddy, it was necessary to hire horse trucks for taking care of that business. The management at length decided to combine the two methods of transportation, and purchased the business of the Wakeman & Morse Transfer Co., one of the largest horse power concerns in the city. The combination has been completed, with a capital stock of \$65,000, and main offices at 13-27 First street. The entire first floor of the New Market building, occupying a quarter of a block, has been leased, affording large storage space, in addition to the warehouse, garage and charging station at Fifth and Hoyt streets, covering a quarter block and formerly the home of

the Auto Despatch concern. The officers of the consolidated company are: President, H. W. Goddard, formerly president of the Auto Despatch Co.; vice-president, Dr. Byron E. Miller; secretary, B. W. Gage. Mr. Wakeman, of Wakeman & Morse, retains an interest and will continue in an active position in the company, and his son, Clay Morse, also remains in the office. Mr. Gage has charge of the operating department, and Mr. Goddard is the general manager of the business.

The electric equipment consists of five freight trucks and three coaches, operated by storage battery. The capacity of the trucks ranges from 2 to 5 tons. The coaches carry twenty-four passengers each, and have a battery capacity the same as a 3-ton truck. The tires are of solid rub-



IVEL AGRICULTURAL MOTOR WORKING AT WHEAT CUTTING AT MIDNIGHT BY AID OF ACETYLENE LIGHTS

ber. The only criticism that has been made of the trucks is in relation to the perishable nature of the tires. The company has tried two types of tires, and both have proved unsatisfactory. Portland's business district is paved with asphalt, wooden blocks and granite blocks. The district spreads over a large area, on both sides of the Willamette river, embracing several square miles. On residence streets there is much macadam pavement, and in the last 2 years bitulithic pavement has come rapidly into use.

Electric power for operating the trucks is supplied from the plant of the Portland General Electric Co. at a cost of 40 to 50 cents per truck per day, depending on the tonnage of the truck. Wages paid for reliable drivers are \$2.60 to \$2.75 per day. The company has suffered no accidents or losses through operation of the trucks. In addition to the electric trucks, it uses sixty-five horses with wagons and drays. The horses take care of the bulk of suburban business, but in fair weather and on paved streets the electric trucks successfully operate 25 miles without recharging.

MIDNIGHT HARVESTING

The Ivel agricultural motor which has for 4 years proven itself the pioneer of its class on the farms of England and Europe is during the present harvest adding new laurels to its already long chain of successes. An illustration showing the Ivel at its midnight task of cutting wheat on the farm of George Pope, Furzon hall, near Biggleswade, England, on the evening of August 2, 1906, tells graphically the admirable adaptation of this machine for such services. The field in which the machine is shown operating contains 32 acres, the wheat on which was cut in 13 hours by one binder of the 6-foot class.

To do this work by horse would have required a three-horse team 3 days, as with heavy crops a three-horse team will rarely accomplish more than 11 acres a day. The value of the gasoline motor for agricultural uses is demonstrated by this performance. Two days in harvest time often mean hundreds of dollars saved, especially if the weather is unsettled. By this motive power it is possible to leave the crop of wheat standing until it is all ready for cutting, but with the use of horses it would mean that the portion cut the first day might be slightly under ripe and that cut the third day a little over ripe, or should the entire field be left until ripe and ready to cut, then by the third day it would be considerably over ripe and much shelling of the grain and large loss thereby would follow. The possibility of doing night work with the Ivel is due to the use of acetylene lights stationed at the corners of the standing grain. Similar lights are fitted to the motor.

The maker of the Ivel, the Ivel Agricultural Motors, Ltd., 45 Great Marlborough street, London, W., Eng., has made a specialty of record-breaking farm performances during the past 4 years, and on every occasion the gasoline motor has shown a marked superiority over horses. This is owing to the peculiar design of the Ivel, with its two broad driving wheels at the back, its single front steerer, and its two-cylinder gasoline motor supported on the triangular framework. The pipe rising from the side of the driver is for directing the exhaust away from the dry ground or stubble, where it might cause fires. Using broad driving wheels insures ample traction on all surfaces and little sinking of the wheels even when ploughing damp ground. When not engaged in tilling the soil or harvesting, the Ivel can

be coupled to a road wagon and used in drawing grains to market, at which work a higher gearing will permit of an average speed of 8 miles per hour. Where continued road use is desired a set of narrow driving wheels is furnished. In farm work the average speed maintained is 6 miles an hour, a speed general where binders, such as illustrated, are drawn.

NEW MOTOR BUS RULES

London, Aug. 4—Following hard on the heels of the motor car commission report comes the report of the select committee of the house of commons constituted to inquire into the problem presented by the ever-growing passenger vehicle traffic of London. It is a voluminous document and a goodly portion of it is devoted towards dealing with motor buses. The recommendations regarding these are:

The speed limit of motor buses should remain at 12 miles an hour in London, and it should be more strictly enforced by the police.

Drivers of motor buses outside the metropolitan area should be compelled to have a certificate of competency, granted either by an official body or by the automobile club.

All heavy traffic, including motor buses, should be confined to certain main lines of route across London, and should not be allowed to wander indiscriminately into side streets and minor thoroughfares.

With regard to nuisances, such as smell, smoke, noise, vibration, etc., complained of with regard to motor traffic in the streets, recommendations are made which are considered likely to have the effect of removing many of these vehicles from the streets.

The use of the taximeter should be legalized, as in Paris and Berlin, and a sale of cheap fares is suggested for short distances, including 6 pence for half a mile and 1 penny for every subsequent sixth of a mile, with a minimum charge of 6 pence.

As the motor bus problem is likely to follow the same lines in America as with the English some of the information contained in the report may not be amiss.

In the year ended June 9, 1906, more than 521 motor buses were licensed.



THE MOTOR BUS, NO LONGER AN INNOVATION, IS BECOMING ONE OF THE LEADING PASSENGER LOCOMOTIONS OF OLD LONDON

metropolitan police. Allowing that 25 per cent of these are daily in garage, undergoing adjustments or repairs of some sort, the total daily mileage of the balance is still estimated at the big figure of 47,000 miles, while the 400 vehicles of this class represented by the Motor Van, Wagon and Omnibus Users' Association are stated to convey over a million and a half of passengers per week, or at the rate of 80,000,000 a year. Obviously, therefore, the motor omnibus "has met the daily need of an enormous number of people," as the report states. It is also pointed out that the fortunes of a great manufacturing industry are bound up with this new form of public vehicle, one firm alone having contracted to deliver motor omnibuses to the value of \$1,400,000 before the end of the present year. A development so inevitable, so popular and of such financial and social importance is certainly not one to be lightly interfered with. On the other hand, the reasonable and justifiable complaints that have emanated from householders, shopkeepers, professional men and others, the value of whose property has been diminished, or whose earning power or health has suffered from the vibration and noise caused by these vehicles in London thoroughfares, cannot in fairness be disregarded. Confronted by this difficult problem, the committee has sought to solve it by taking a middle course. It admits fully that the motor omnibus has come to stay and the only method, therefore, open to it was to diminish the nuisance it creates so far as possible, but without seriously interfering with its use or development. In pursuance of this policy the committee advocates a more careful inspection of vehicles that are constructed after the original type has been passed,

and closer periodical supervision. This means practically that every omnibus put on the road will be subjected to more severe tests than at present. Such a regulation is in strict accordance with common sense, and so, too, is the recommendation that vehicles used outside the London area should be specially licensed and their drivers, too. The Handcross disaster, in which nine lives were lost, if nothing else has demonstrated the necessity for such provision. The committee has been unable to accede to the request that overhead awnings should be allowed for the comfort of outside passengers, the reason presumably being that these arrangements would dangerously impair the stability of the vehicles. It is not recommended that the present speed limit of 12 miles an hour should be interfered with, nor that mechanical devices for the absolute limitation of speed should be adopted. The complaints of householders and occupiers of premises affected by the motor traffic are dealt with in the following admirable passage: "The rights of millions of people who benefit by the increased speed and area of public motor traffic may fairly be regarded as outweighing the increased disturbance, within reason, of those who have elected to carry on business in main thoroughfares. It is, on the other hand, a condition of civilized life in a city that a citizen to whom comparative quiet is essential should know that by residing in certain places he will be assured of it."

The conclusion is that routes should so far as possible be confined to main thoroughfares, and that both these and the stopping places should be authorized by the authorities. Further, that the slow-moving "mechanical traffic" crossing the metropolis should also be regulated and no longer be allowed to wander about

town at its own sweet and ponderous will. In reference to the noise, smell and vibration produced by motor omnibuses, the committee thinks these are all mainly preventable. The "low hum of machinery" is, it considers, the only legitimate noise a well regulated motor bus should be guilty of. The defects which are now so patent arise, it is said, either from bad original construction, insufficient adjustment and overhauling, or incompetent driving, and it is recommended that the police should "without further delay, exercise in a much more severe manner their powers to remove offending vehicles from the streets."

MOTOR MAGAZINE DELIVERY

Magazine publishers of Indianapolis, Ind., are considering the question of the delivery inside of Indianapolis by automobiles. The great cost of publication combined with the high postal rates in the city is said to be driving them toward the automobile. Such an experiment was conducted successfully by the Hustlers' Magazine. The magazine circulated 2,000 in Indianapolis, the postage on each copy being 2 cents. In mailing it was necessary to wrap each copy, address, affix the stamps and cart to the postoffice. From 1 week to 10 days later would come several notices of removal, and such magazines were lost.

The assistant general manager of the magazine had a runabout of popular make that he used for the experiment. The saving on postage was \$40 a month to start with. It was also unnecessary to address the magazines, deliveries being made from a book. The cost and trouble of wrapping each magazine was saved and the whole delivery required only from 2 to 3 days at a cost of about \$3 a day.

FROM THE FOUR WINDS

Kiser May Marry—Rumor has it that Earl Kiser is about to become a benedict.

Young, But Good Driver—Eddie Beeman, of Orlando, Fla., who is 13 years of age, is one of the youngest practical chauffeurs in that state. He drives his father's big Cadillac with a speed and confidence equal or superior to many a professional.

Raider Uses Automobile—C. W. Trickett, appointed special assistant attorney general for Kansas City, Kan., to close the saloons, or "joints," as they are called, which are running in defiance of the dead-letter prohibition law there, uses an automobile in his raids. This he fills with deputy sheriffs and then hauls his prisoners off to jail.

Cars for Rochester Officials—The board of contract and supply of the city of Rochester, N. Y., is considering the purchase of automobiles for two of the city's officials, the assistant city engineer and the superintendent of the waterworks department. The board has already provided an electric runabout for the superintendent of the public parks, and electric police patrol wagons have replaced the old wagons.

Mexicans On Long Trip—Two young Mexicans, Ignacio Morales y Conde and Manuel Morales y Conde, arrived at Syracuse, N. Y., a few days ago in an automobile from their father's immense farm at Puebla, Mexico. They remained several days traveling into remote sections of Onondaga county to purchase cattle. They ran one day more than 40 miles to look at one cow. The farm for which they are buying live stock consists of 24,000 acres. There are railroads running on the farm and the entrance to the stable is said to be more elaborate than a pretentious bank.

Long Stunt In an Electric—C. P. Smith, of the Genesee Motor Vehicle Co., of Rochester, N. Y., recently had a prospective purchaser for a Babcock electric in Batavia, and drove the car to Batavia for the purpose of making a demonstration. While in Batavia it occurred to him that there was a man in Leroy, N. Y., with whom he had had some correspondence, and he thought it advisable for him to go there and give him a demonstration. On his arrival there, inasmuch as he had had such good success he concluded it would be a good idea to make the run to Buffalo. The trip from Rochester to Batavia, 39 miles, was made in 2 hours 30 minutes. After finishing the demonstration in Batavia and in Leroy he made the trip from Batavia to Buffalo in 2 hours 17 minutes, a distance of 40 miles. Owing to the high speed maintained it was necessary to charge in Batavia. The entire trip, including demonstrations, was 110 miles. Mr. Smith will later in the season endeavor to

make a non-stop trip between Rochester and Buffalo.

Mail Carriers Wake Up—Two rural mail carriers out of Waukomis, Okla., are using automobiles on their routes, another has ordered a car and two other carriers may follow suit. It takes a horse 6 to 8 hours to make a trip which can be made in 2 with automobiles.

Nothing the Matter With Kansas—A. E. Agrelius, of Lindsborg, Kan., has finally interested the motorists of his state and a state division of the American Motor League will be organized at Topeka Labor day. The organization will be effected in the morning and in the afternoon there will be a parade and a gymkhana at the fair grounds.

Gets Good Mileage—E. L. De Camp, of Kansas City, Mo., in a recent trip with his Aerocar, drove from Kansas City to Sedalia, a distance of 114 miles, over rough hilly roads, with the exception of 35 miles of turnpike, which was in good condition. He carried four passengers and for the entire trip used only 4 gallons and 3¼ quarts of gasoline, an average of 23.4 miles per gallon. This is ½-mile better per gallon on the average than the Aerocar which recently won the first prize in the economy test in the Minneapolis event.

Joke On the Chief—Arrested on a charge of breaking the automobile law and later taken before a police judge and fined 11 cents and given the cheerful order to leave town within 24 hours, George Welty, chief of police at Owosso, now knows how it feels to be a driver and get arrested. Mr. Welty was in attendance at the state convention of chiefs of police in Lansing, Mich., and was running over the limit in an automobile. The Lansing department arrested him for a joke, telling him they were only retaliating for the arrest of a prominent Lansing citizen in Owosso recently. The 24 hours gave him time to attend the remaining sessions of the convention.

Convincing Argument—Not long ago the residents of Tulane avenue, one of the principal streets of New Orleans, began to tumble to the fact that their thoroughfare was decidedly the worse for wear. There were holes, many and deep, in that once beautiful street. It had been paved only about a year and a half before with the "very best" asphalt—but that is another story. Automobilists also began to take notice that the touring qualities of the pavement were anything but pleasant, and they needed that street in the worst sort of a way. So they hatched up a scheme. To the city hall they hied them and invited four of the city officials to take a nice little ride in an automobile. Some repairs were made on Tulane avenue

shortly afterward, and it is stated that more are in prospect for the near future.

Kansas City's Endurance Run—The endurance run to be given under the auspices of the Kansas City Automobile Club is to be held about September 15. The route will be 100 miles long, over a course yet to be selected. The Glidden tour rules, with necessary modifications will be used.

Would Build Toll Road—A number of Toledo automobilists have formed a combine to secure the consent of council as to the building of a short highway to connect Arlington avenue with the boulevard at Walbridge park. The parties interested are willing to build their own road if permission can be secured to charge a small toll until they get their money back.

Shell Road for Motorists—A shell road between New Orleans and Hammond, a distance of about 70 miles, is the latest improvement proposed for the state of Louisiana. Incidentally, an interurban electric will parallel the roadway between the two cities. A. Monteleone, of Hammond, is now in New York conferring with eastern capitalists in regard to the construction of the driveway and railroad. Mr. Monteleone states that the shell road will be made one of the finest in the south, and built with a special view of pleasing the motorists.

Fitch On Long Trip—Ezra H. Fitch, a member of the touring committee of the A. A. A., left Bangor in his White steamer for a 5 weeks' hunting and fishing tour through Maine and Canada. Fitch will tour by way of Patten and Ashland to Fort Kent, where he will cross into Canada and then continue by way of Edmondston and Notre Dame du Lac to Riviere du Loup. From here Mr. Fitch will follow the St. Lawrence river to Three Rivers, from which place he will strike back through the forests, a distance of about 100 miles, to the game preserves of the Laurentian Club.

Pope-Toledo In a Climb—One of the most spectacular bits of automobile work ever tried in Pittsburg was the performance of a Pope-Toledo touring car at Luna park on Friday evening, when Charles Soules drove the machine up and down the steps leading from the entrance of the park to the grounds. Without the slightest start the car was driven against the steps, which are of 6-inch rise and 8-inch tread. There was a steady pull as the front wheels took the raise, then the car began to ascend and steadily it mounted to the top of the stairway and disappeared through the peristyle, only to appear a moment later at the top while the crowd cheered. The crowd was driven back in case of accident and just as steadily as it had gone up the big machine was dropped

from step to step until it reached the bottom without the slightest mishap.

Mexican Club—The Automobile Club of Guadalajara has been organized with Governor Ahumada as president. The principal object of the Mexican club will be to improve the roads in the state of Jalisco, but it will also endeavor to build roads suitable for automobiles from that city to many of the principal points of the state. Long-distance races will be held by the club in the near future.

Big Quaker Run—Pittsburg automobilists are preparing to join the motorists from Buffalo, Cleveland and intervening towns in a great run to Cambridge Springs, Pa., in September. A number of local cars will go over the ground in a few days in order to map out the best route. It is expected there will be 500 machines in the run which will be merely a social affair and not a speed or endurance test.

Midnight Thief Chase—Chief of Police Murphy and County Sheriff Bolenbaugh, of Marysville, O., experienced an exciting ride in an automobile last Friday midnight in chasing two horse traders into an adjoining county, where the capture of the fakirs was made. The traders proposed to trade a pelter and \$15 for a good horse belonging to Frank Howard, a farmer near Marysville. The traders hitched the farmer's horse to their buggy under the pretext of "trying it out," but they failed to return, when the farmer got uneasy and sent the officers after the fleeing men, who were soon apprehended.

New Bridge About Ready—The new Lincoln avenue bridge, a beautiful stone structure costing \$75,000 in the east end, Pittsburg, will be ready for use by September 15, much to the delight of automobilists who have had to turn back by the dozen this summer while on their way to the Verona boulevard leading up the Allegheny river. The bridge will afford one of the finest perspective points for motorists in Allegheny county. It is 60 feet above the Beechwood boulevard and 14 feet beneath the Pennsylvania railroad stone bridge over Silver lake. A magnificent view of the Allegheny river and the East Liberty valleys is obtained from this point.

Boon for Soldiers—Quite a revenue is being derived by the automobile dealers of Tacoma, Wash., as a result of the military encampment at American lake, 12 miles south of the city. There are several thousand troops in the camp, and when they have leave of absences they naturally go to Tacoma. Then they forget all about train time, and that leaves the problem how to get back to camp in time for the morning roll call. As there are no cars running out that way after midnight the automobile is the only thing. Some of the soldiers have had some close shaves in this matter, but no reports have been received to the effect that it has been necessary to court martial any of them. As soldiers al-

ways travel several together, the expense of the car is equally divided.

Road Repair Money Distributed—State Highway Commissioner Huston, of Ohio, last week allowed \$1,704.54 each to Hamilton, Pike, Miami, Clermont, Adams, Lawrence, Perry, Allen, Henry, Sandusky and Cuyahoga counties for the repair of roads. This is the total allowance for the year under the new law.

Says State Law Is Void—Secretary of State Laylin, of Ohio, has given out his opinion that the recently-enacted automobile state license law is unconstitutional. However, he states that this does not prevent municipalities from compelling the registration and numbering of machines with the city auditor.

Queer Mixup—Dexter Fairbank, the Cleveland agent in Chicago, had a car stolen the other day and reported the matter to the police. Later on the machine was recovered but the police forgot to send around word to this effect to the outlying stations with the result that the next day his chauffeur was arrested out in South Chicago. The tangle, however, was soon straightened out.

Folk's New Plan—Governor Folk, of Missouri, has a new plan to secure state roads in Missouri. According to a statement by him the other day, he will ask the next legislature, which convenes in January, 1907, to pass a law requiring the dramshops to pay a state license of \$200, this amount to be turned into a fund for state roads. As there are 650 saloons in Kansas City alone, it may easily be seen that the revenue derived would be large. The governor's plan is to begin the road system with two great highways across the state, one from St. Louis to Kansas City, the other from Arkansas to the Iowa line. With these as a framework, other roads could be built until the state is covered with a network.

Car-Wreckers Foiled—As the result of a deliberate attempt to wreck automobiles at Zeeland, Mich., on the return trip from the Venetian evening given by the Macatawa Bay Yacht Club at Black lake, E. M. Lubeck, proprietor of the Lubeck Automobile Co., together with the occupants of six machines which were following him, had an exceedingly narrow escape from serious injury if not death. Mr. Lubeck, with a party of friends, was returning from Black lake in his Oldsmobile touring car. The car was going at a high rate of speed. At Zeeland there is a sharp bend in the road and just as the machine rounded this bend the flaring acetylene lights of the automobile disclosed a pile of railroad ties across the road. The machine was stopped with a jerk, stopping within a distance of a foot of the obstruction. The cars following were warned. Upon alighting the occupants found the ties piled in such a way that there was no dodging them. Mr. Lubeck will take the

matter up with the Ottawa county authorities at the earliest possible moment.

H. H. Franklin On a Tour—H. H. Franklin, of the H. H. Franklin Mfg. Co., of Syracuse, started Friday on a 2,000-mile tour with a 1907 model Franklin car. He will visit Saratoga, Lake George, Boston, Massachusetts coast towns, New York, Philadelphia, Baltimore, Washington and Atlantic City and will be gone 3 weeks on his summer outing.

New Club at Norristown—The Norristown Automobile Club, of Norristown, Pa., has been organized with the following officers: President, John H. Rex; board of directors, W. H. Slingduff, F. M. Jaquith, P. V. Hoy and J. F. Boyer; secretary, Edwin S. Nyce. The object of the club will be to build a clubhouse for the use of the members, and also to secure favorable legislation for automobilists, a move that is receiving great support.

Good Roaders to Meet—A state good roads convention will be held in Chillicothe, Mo., September 3 to 8. Officials and commercial organizations have been invited. The meeting may result in an appeal to the governor to call a special session of the legislature to act on road matters. Promises have been made that eight different firms will compete in the road building contest, in which prizes are to be awarded for the best stretch of road built. This will give opportunity for thorough tests in road-making machinery, in which the farmers are interested.

Tire-Shooter Fired—The South park commissioners of Chicago have discharged from the force Officer Edward Shewbridge, who fired a shot that punctured a tire on the car of Henry C. Flonacher. The commissioners held that the shooting was unjustifiable. On top of this comes information from Racine, Wis., that the chief of police there has ordered his policemen to shoot automobilists who refuse to stop when ordered to do so. This motorphobic town also has decided to stretch ropes across the streets in order to hold automobiles down to 12 miles an hour. So far, however, there has been no shooting.

Kick on Road Price—At a recent meeting of the board of supervisors of Ontario county, N. Y., the good roads problem in that county was discussed. Many of the supervisors said they were dissatisfied with the progress of the road building in that county, and several of them, including Supervisor Simmons, of Canandaigua, complained about the roads constructed. Mr. Simmons stated he considered the state roads, costing \$8,000 a mile, far inferior to the roads constructed some years ago by county road builders at \$1,700 a mile, for finish, durability and all-around satisfaction. This statement was corroborated by others on the board, while some of the other members took exceptions, and this precipitated quite a heated debate on the subject. This was as far as they got on the proposition, though.



GROUP OF BABCOCK ELECTRICS LINED UP AT BUFFALO

Step Up for Robertson—Ed. A. Robertson, has been made general manager of the Hartford Suspension Co.

Newmastic in New York—The Newmastic Tire Co., an eastern concern, has opened headquarters at 370 Manhattan avenue, New York.

Electric Garage—The Electric Vehicle & Garage Co., formerly at Third and Wells streets, Milwaukee, has removed to 621 Grand avenue, where electrics will alone receive attention. James G. Zimmerman is general manager.

Novel Picture—That electrics are popular in Buffalo was demonstrated recently when there was a general rendezvous of users of Babcock electrics in one of the parks. A photographer got busy and as a result produced a decidedly novel photograph.

Combines Business With Pleasure—George C. John, acting sales manager for the St. Louis Car Co., is on his way from Chicago to New York in an American Mors. He will visit the trade in each of the big cities and towns along the road. He is accompanied by J. N. Dyer, E. R. Estep and a mechanic.

Spiers With Corbin—John C. Spiers, formerly with the Autocar Co., has signed a contract as factory manager of the Corbin Motor Vehicle Corporation at New Britain, Conn. Mr. Spiers dates his motoring experience back to the days when he was building the old steam Locomobile for the Locomobile people. Of late Mr. Spiers has been general factory manager of the Wayne company. He contemplates turning out 500 Corbins this coming year.

Corbin Move—A move in connection with the disposal of its product is announced by the Corbin Motor Vehicle Corporation, of New Britain, Conn., in taking over the New York agency of the E. T. Kimball Co., including store lease, office fixtures, etc., located at 1779 Broadway, New York city. Lafayette Markle, who has been connected with the company for some years, will be the New York manager, and the change goes into effect im-

mediately. Mr. Kimball will, however, retain the Boston agency for the Corbin car, having taken one of the most prominent stores in the Motor Mart in that city.

Owen to Wed—Cupid's darts have at last found a vulnerable spot in Percy Owen, eastern sales manager of the Aerocar Co., with headquarters in New York, who will in October forsake bachelorhood for the benedict realm.

Michelins in the Ardennes—Duray, Hanriot, Rougier, Barillier and Gabriel, the first five to finish in the Ardennes circuit race, had their cars equipped with Michelin tires. In addition to this the Michelin landed in seventh place on Sorel's machine.

Quakers' Latest—The latest addition to the establishments on Philadelphia's gasoline row is the Auto-Gas Co. of Pennsylvania, which has secured and fitted up quarters at 336 North Broad street. The concern will handle Autogas tanks and do recharging for the trade and individuals.

Changes at Lansing—S. Schuyler Olds, who has been manager of the commercial department of the Olds Motor Works, has left that company and has gone to Detroit, where he intends to embark in the commercial car business on his own account. George F. Day, who has been assistant manager, has been promoted to the post of manager.

Joins Chicago Colony—The Long Mfg. Co., 381-383-385 Wabash avenue, Chicago, maker of spiral tubing radiators, hoods, dashes and fenders, soon will be installed in its new home, 1430-32-34 Michigan avenue, where Mr. Long's new building is rapidly nearing completion. The ground floor will be occupied by the G & J Tire Co. branch and H. Paulman & Co., Chicago agents for the Pierce Great Arrow. The second floor will be utilized by the Long Mfg. Co. for offices and assembling department and the third floor for factory purposes. Meantime the present site of the Long Mfg. Co., on Wabash avenue, will be continued as heretofore, the growth of this concern's business during the past

2 years having been sufficient to keep both plants in operation. The new Michigan avenue building is directly in the heart of the Chicago motor car selling district.

Williams With Aerocar—A. C. Williams, formerly connected with the sales department of the H. H. Franklin Mfg. Co., is now on the staff of the Aerocar company.

Boston's Latest—The Holmes Motor Vehicle Co., of Boston, has been incorporated with a capital stock of \$100,000, to deal in motor vehicles. The incorporators are V. W. Keith, of East Bridgewater, and L. A. Chandler, of Boston.

Picnic for Elyrians—Employees of the Standard Welding Co. and the Dean Electric Co., of Elyria, O., held their annual picnic at Shaddock's lake park at Vermillion, O., last Saturday, baseball, racing and athletic events being on the card.

New Enterprise—The General Mfg. Co., of Elkhart, Ind., of which D. E. MacCarthy, formerly superintendent of the Burroughs Adding Machine Co., is president and general manager, is beginning the manufacture of automobile transmission gears, an automobile whip socket and other specialties. The concern was organized April 1, taking over the business of the New National Mfg. Co.

Brooklyn After an Association—Efforts are being made to form a Brooklyn automobile trade association, and it is expected that this time the venture will be successful. James F. Fairman, who is to be the manager of the Brooklyn Motor Supply Co., recently organized, is to undertake the work necessary to the formation of the association. Mr. Fairman's headquarters are at 1175 Bedford avenue.

Will Make Annable Spring—The Annable Pneumatic Spring Co. has been formed with a capitalization of \$75,000 to manufacture an automobile spring invented by W. W. Annable, of Grand Rapids, Mich. Patents on the spring are now pending. The plant will probably be located at Detroit, as the company is largely composed of capitalists of that city. The officers are: President, Strathearn Hendrie; vice-president, W. W. Annable; secretary-treasurer, Berthune Duffield. It is claimed that by the use of this spring solid tires can be used on automobiles.

Innovation for Tacoma—The Acme Automobile Co., of Tacoma, Wash., has just moved into its new garage at 1010-12-14-16 Tacoma avenue. The garage occupies the entire ground floor of the new building. Mr. Hurley is the first Tacoma dealer to appreciate the possibilities of Tacoma avenue. It is 5 blocks above the lower level of the city, and circling this hill, leads to the north side residence district, and to the country south, without having any grades to encounter. Now that Mr. Hurley has set the pace other dealers are looking around to see what they can find along the same thoroughfare. It is safe to say they will all finally be accom-

modated, and that it is only a matter of a year or so when Tacoma avenue will be the automobile row of the city.

On Ambulances—Shock absorbers have been put on an ambulance by the White Sewing Machine Co. The company recently furnished one to the Philadelphia general hospital, which has been doing good work there during the past few weeks. It is fitted with Truffault-Hartford shock absorbers.

More Building Operations—The Mason Motor Co., of Omaha, is planning a new brick factory, two or three stories in height, with a 100-foot front and a depth of 150 feet. If its present location at East Fifth and Vine streets is found to be inadequate a 5-acre site will be selected just outside Omaha or near Altoona.

Another New York Branch—The French branch of the Westinghouse Electric & Mfg. Co., known as the Société Anonyme Westinghouse, is to establish in New York an American branch for the sale of the Westinghouse cars made at its factory at Havre. They are four-cylinder cars, of 40 horsepower. Maurice Coster will be at the head of the branch and will be assisted by Alexander M. Thackera.

Swallow Company Starts—The Steel-Swallow Automobile Co., of Jackson, Mich., has filed articles of incorporation with the secretary of state and will be in operation shortly. The new concern is expected to prove a valuable addition to Jackson's automobile manufacturing industry. The company is capitalized at \$100,000 and the stockholders are David Dearing, J. C. Richardson, Louis F. Boos, William E. Belows and Lee Alderdyce. The concern will manufacture the Steel-Swallow automobile and motor after patents secured by David Dearing.

Alcohol Plant—By the incorporation of the Buckley Fruit Growers' Association, with a capital stock of \$5,000, it is evident that the opportunities of denaturized alcohol is anticipated on the Puget sound. The articles just filed with the county auditor in Tacoma, Wash., provides for the manufacture of the commercial alcohol. This will be the first effort of the kind on the Pacific coast. The incorporators of the new company are all residents of Buckley, as follows: John B. Frost, John A. Hamilton, E. M. Mittam, Charles Wilson and C. C. Whitmore.

Buick Change—E. H. Godshalk, president of the Keystone Motor Car Co., Philadelphia agent for the Packard and Auto-car, last week closed with H. E. Shiland, factory representative of the Buick to represent that car in the Quaker city during the coming year. The Buick was formerly handled there by the Pennsylvania Electric Vehicle Co., but since the dissolution of that concern the Buick people have been considering a half-dozen proposals for the agency from as many local concerns. The Keystoneers won out, and the Buick will hereafter hold forth at their

spacious quarters at 238 North Broad street along with the Packard and Auto-car.

Sackett Sales Manager—L. J. Sackett has been appointed sales manager of the Moon Motor Car Co., and has already assumed his duties at the Moon factory in St. Louis.

Takes on Apperson—A change is announced in the New York agency of the Apperson cars, which in future will be handled by the Metropolitan Auto Co., the garage branch of C. A. Duerr & Co.

Consolidated Plant to Continue—At the meeting last week of the creditors of the Consolidated Mfg. Co., of Toledo, O., former maker of the Yale car, it was decided to continue the operation of the plant under the receiver, David Robison, Jr.

Motor People Going East—Because the demand for its motors is nearly all from that section of the United States, the Wolverine Motor Works, of Grand Rapids, Mich., will remove to Bridgeport, Conn., within the near future. The demand for marine motors for fishing boats and also for motor boats is extremely strong in all sections of the east.

Will Handle Reo in Columbus—J. O. MacDonald, who has been connected with various companies in central Ohio and also with a New York concern, and F. M. Titus, of the Marion Automobile Co., of Marion, have formed a partnership under the firm name of MacDonald & Titus. Their garage is at 138-140 East Spring street, Columbus, O. The new firm has been appointed agent for the Reo.

Making Wider Doors—As a result of some good work on the part of the American Motor Car Manufacturers' Association most of the railroads are now building their freight cars with wider doors than usual. This is going to be a great benefit to motor car manufacturers in shipping machines, which in many cases heretofore have had to be stripped and "knocked

down" before they could be put in the freight car. The new freight cars which the railroads are having built, especially those intended for carrying automobiles, will have doors from 6 to 7 feet wide.

Glide Man Moves—The George J. Scott Motor Co., the New York agent for the Glide, has moved its headquarters to 1720-1722 Broadway, whose completion as a garage is expected by September 1.

Guarantees Protection—The Avery Portable Lighting Co., of Milwaukee, maker of Autogas tanks, has sent a circular to the trade and motoring public in which it guarantees "all dealers and users absolute protection against loss by reason of threatened or actual prosecution." The circular also states that its patent, No. 816,059, issued March 27, 1906, is being infringed and that it proposes to call all infringers to account.

Catalogs Wanted—E. J. Day & Co., 146 Twelfth street, Oakland, Cal., have written Motor Age asking that manufacturers of automobile supplies be requested to send them catalogs and jobbers' discount sheets because all their trade literature as well as their entire stock was destroyed in the recent San Francisco fire. Day & Co. represent twenty-seven manufacturers of supplies as coast distributors as well as doing a general jobbing business.

Camacho Changes—A. F. Camacho, formerly manager of the American Automobile Storage Co., of New York, and more recently in charge of the Gaither-Owen Carbureter Co., has become connected with the National Sales Corporation, of New York. Mr. Camacho will assume the position of assistant manager and will look after the technical details in connection with the National Sales Corporation's business. The Gaither-Owen carbureter will be sold through the National Sales Corporation hereafter and Mr. Camacho will devote his special attention to that appliance in the immediate future.



RECENTLY CONSTRUCTED ACME GARAGE IN TACOMA, WASH.



CURRENT AUTOMOBILE PATENTS



Fan Flywheel—No. 828,867, dated August 14; to H. Stoltenberg, Davenport, Ia.—Instead of using a cooling fan or making the flywheel spokes in the shape of fan blades, the inventor attaches to the rim of the flywheel a series of short, diagonally-placed vanes, which serve to draw the hot gases off from around the motor. To attach these a clamping band is placed around the flywheel periphery and to this band angle-shaped clamping strips carrying the blades or vanes are attached.

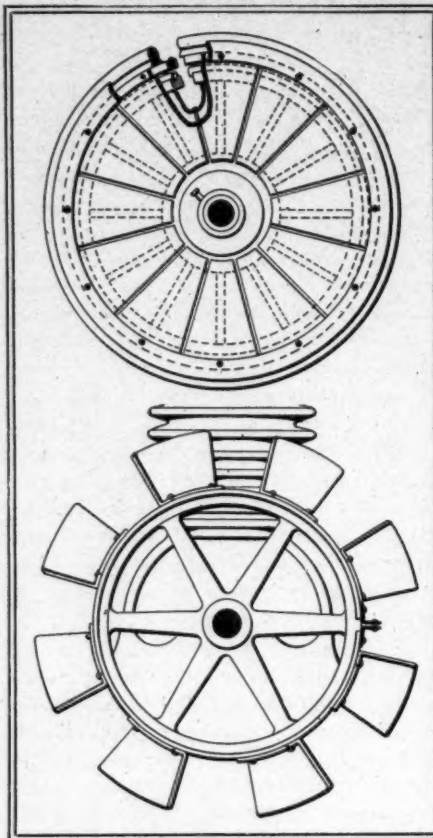
Dual Automobile Wheel—No. 828,863, dated August 14; to A. J. Robertson, Chicago, Ill.—In order to have the benefit of the resiliency of a pneumatic tire and yet not carry it on the rim of the wheel, where it is exposed to all the possibilities of puncturing and wear, the inventor uses two wheels in forming a single road wheel. One wheel is within the other and carries a pneumatic tire on its rim. This tire bears on the inside of the rim of the outer wheel, which carries on its outer face a solid rubber tire. The inner wheel is carried on the axle shaft and the outer one on tubular extensions of the hub of the inner wheel. The wheels are not secured rigidly together, permitting of their traveling at different speeds.

Elastic Cylinder Jackets—No. 828,656, dated August 14; to T. Huber, Billiancourt, Fr.—The outer walls of the water-jacket are indicated by the wavy lines of the illustration. At the bottom this jacket is held between an integral flange on the side of the cylinder and a spring ring fitting over the flange and clamping the jacket edges in position. On the head of the cylinder is a similarly-shaped flange and other clamping rings retain the edges of the jacket in position, making at the same time a water and gas-tight union. The object of the wavy metal in the jacket is in case of water freezing there is an opportunity for the water to expand without bursting the jacket, the jacket's wavy walls bulging out, giving additional room for the expanded ice.

Mail Tire Cover—No. 828,641, dated August 14; to I. Clifford, London, Eng.—Lying on the tread part of the tire is a series of rubber blocks, each contained in a metal framework. On the sides of the framework are hook flanges, to which connect the sides of a chain coating of mail. The other side of the mail connects through bolts and locknuts with clamps that encircle the rim of the wheel. By tightening the locknuts the coat of mail can be tightened to any extent, and according as the mail is tightened so is the series of rubber blocks on the tread locked in position.

Pneumatic Tire—No. 828,416, dated August 14; to F. Meenger, New York city

ROBERTSON'S DUAL WHEEL



STOLTENBERG'S FLYWHEEL

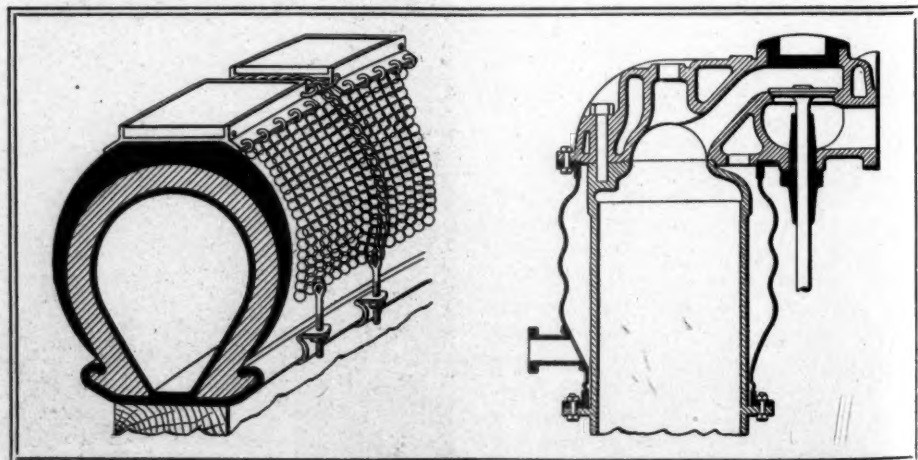
—Three parts combine in this tire. Inside is an inflatable air tube, as in all pneumatics; outside is a cover or casing, and intermediate is a pair of split spirally-wound strips. The casing has a perforated runner or tread part provided with conical-headed screws that carry anti-slip blocks on the tread and have a threaded part for engaging with the tire casing. To fasten the tire to the wheel rim recourse is had to a head, a bolt and a pair of tapering prongs projecting from the head.

Tire Casing Cover—No. 828,701, dated August 14; to W. A. Allen, New York city
—Four ring pieces constitute this tire

cover, one piece for the inner face of the tire, one for each of the tire sides and one for the tread. These parts are suitably attached together, except between one of the side pieces and the piece lying along the inner side of the tire, which is left open for insertion of the tire. To make the opening weatherproof a flap is attached to the inner side of the piece lying against the inner side of the tire. This flap has two thicknesses, one thickness lying between the tire and the inside of the side pieces of the covering and the other flap outside of the side piece. The latter flap attaches in place by a system of lacing.

Magnetic Disk Clutch—No. 828,647, dated August 10; to L. T. Gibbs, Hempstead, N. Y.—The inventor has a typical disk clutch, consisting of a series of circular metal disks secured to the motor shaft and alternated with a series of similar disks connected to the shaft to the transmission case. Instead of forcing these two sets of disks together by a spring the use of levers and an electromagnet is resorted to. A series of radial armature levers, arranged like the spokes of a wheel, are adapted so that by the use of an electromagnet they can be brought into action, pressing the sets of disks together. The object of the magnetic system of pressing the disks together is that any degree of tension can be used according to the electrical force permitted to exert itself in the electromagnet.

Spring Wheel—No. 828,354, dated August 14; to J. C. Warner, Corbin, Kan.—In the wheel an outer rim carries the tire and midway of this rim and the wheel hub is an inner rim. Spokes attached at the outer ends to the outer rim extend to the inner rim through which they pass, and are free for a radial movement. Surrounding each spoke between the rims is a coil spring, on which the weight of the load is carried. As the wheel revolves the load is carried on the spring surrounding the spokes.



CLIFFORD'S TIRE ARMOR

HUBER'S ELASTIC WATER JACKET

American Motor League

Official Bulletin

National Headquarters, Vanderbilt Building, New York

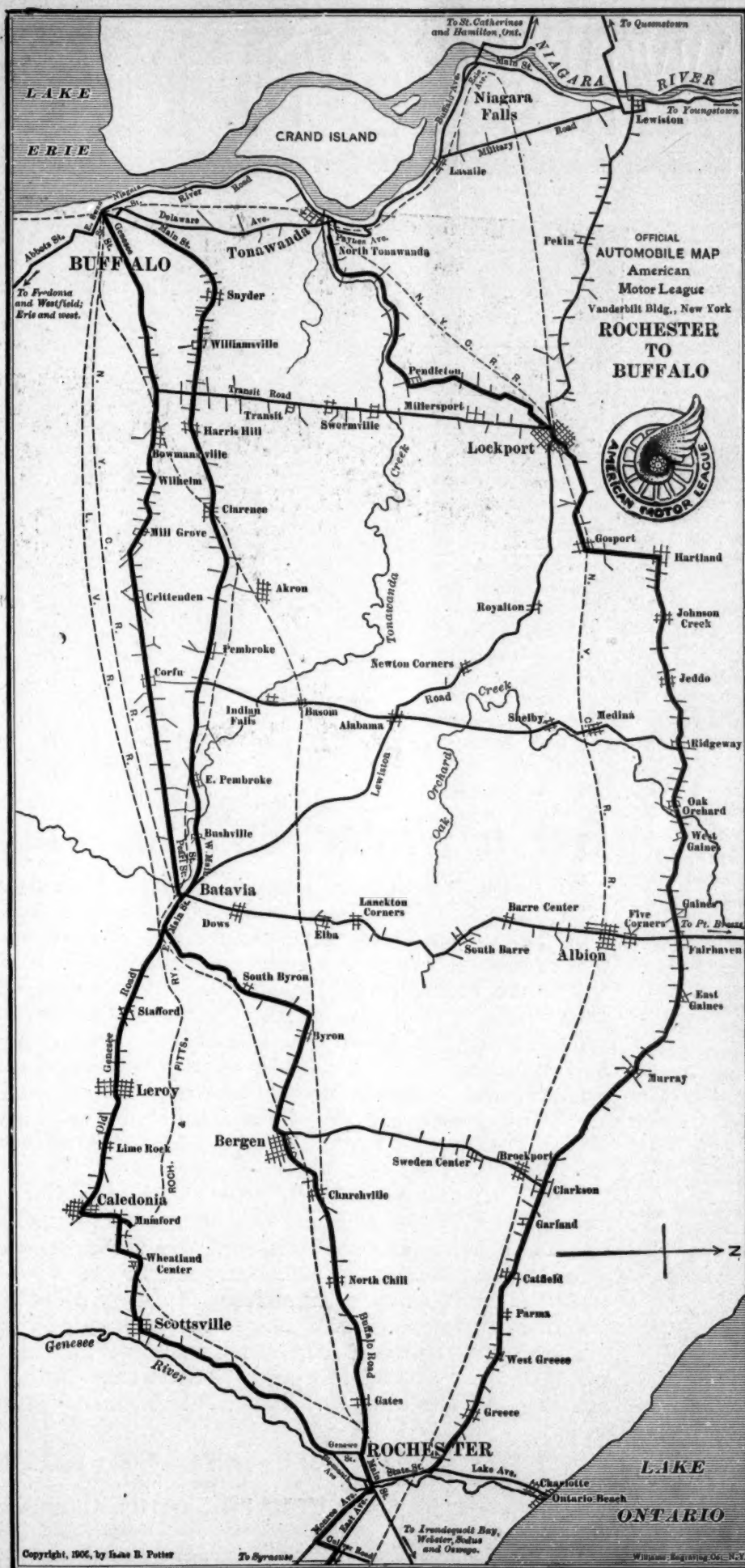
MAP OF ROUTE ROCHESTER TO BUFFALO

Buffalo has more miles of asphalt streets than any other city in the world. Rochester is the county seat of Monroe county—the most enthusiastic and most insistent “good roads” county in the Empire state. Rochester is also the home of Senator Armstrong, whose fame in connection with the Higbie-Armstrong good roads law has been lately supplemented by his management of the insurance investigation as chairman of the senate committee appointed for that purpose. There are three much-used routes between Rochester and Buffalo, varying in length from 73 to 88 miles, and these are all shown by heavy lines on the accompanying map. Two of these routes run through Batavia and thence follow lines, nearly parallel, to Buffalo. The northerly route is by the famous Ridge road through Clarkson, Gaines, Hartland and Lockport. The best, though not the shortest, of the three routes is probably the southerly one, its length being a little under 76 miles.

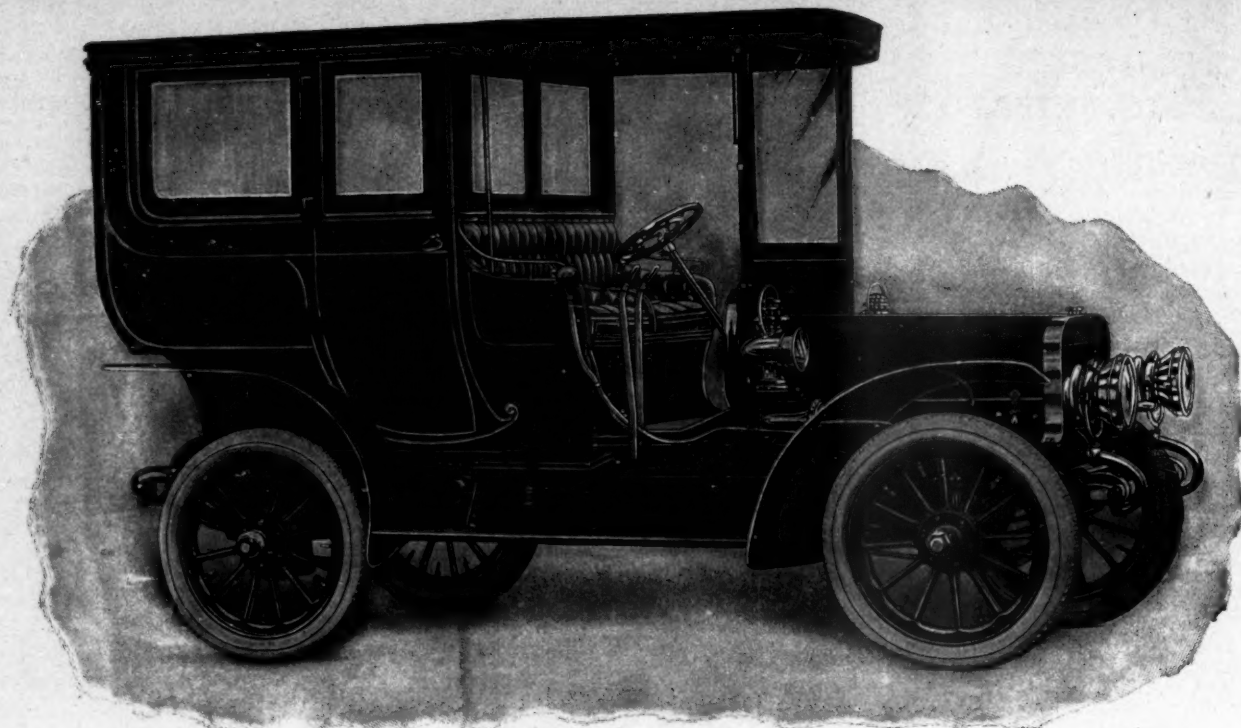
This map and all others appearing in these pages will be printed in the official A. M. L. road books and these will be given free to league members. Besides these maps, each book will contain full descriptions of the routes, with lists of official garages, stations and hotels. Meanwhile, and for convenient use, these maps will be printed on cards with description of route on the back of each and these cards will be distributed under an arrangement which will be presently announced to the automobile public.

ROUTE INFORMATION WANTED

If the reader can suggest a way in which these maps can be made better a word from him would be appreciated. If the reader would like to extend this very interesting work into his own locality he may obtain route blanks and printed circular “How to Describe a Route” by writing to the secretary. If the reader is not a member of the A. M. L. and will recognize that in this work it deserves the support of all motorists, let him send his name and address with 1 year's dues—\$2—to league headquarters and have his name enrolled on the membership list. Full printed information will be sent on request. Address American Motor League, Vanderbilt building, New York.



WINTON MODEL-K



Get a Winter Suit for your Model K

Every intelligent being clothes himself to suit weather conditions. In summer, he is lightly clad. In winter, he bundles up. How foolish a man would be to stay in the house all winter rather than buy winter clothing.

Same reasoning applies to motor cars. *The* open touring car body is unsuitable for winter. Weather too cold, too much snow, rain, wind, sleet, and the like. Might get pneumonia riding in an open car. Some owners store their automobiles all winter, and take to pedestrianism or the street cars.

That doesn't look like good business judgment. Get a winter suit for your automobile—a Limousine Body—and your car can be used all the year around.

The Winton Model K doesn't deserve the ill treatment of being put into storage. That car will go anywhere in any weather, and you can use it in the coldest weather that blows simply by placing a Limousine Body on the chassis. Thus you get the real luxury of motoring, snugly protecting yourself from the elements and making your motor car investment profitable.

We are making a limited number of Limousine Bodies especially for Model K owners, and can make prompt delivery so long as the supply lasts. Detailed description upon request.

The Winton Motor Carriage Co.

Member A.L.A.M.

CLEVELAND, OHIO, U. S. A.

Branch Houses in New York, Boston, Philadelphia, Pittsburg, Chicago and London. Winton Sales Agencies Everywhere.